

National Electricity Rules Version 21

Status Information

This is a draft consolidation based on the latest electronically available version of the National Electricity Rules as at 1 July 2008.

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

Draft National Electricity Amendment (Reclassification of Contingency Events) Rule 2008

TABLE OF CONTENTS

4.	Power System Security	12
4.1	Introduction	12
4.1.1	Purpose	12
4.2	Definitions and Principles	12
4.2.1	[Deleted]	12
4.2.2	Satisfactory Operating State	12
4.2.3	Credible and non-credible contingency events	13
4.2.3A	Re-classifying contingency events	14
4.2.3B	Criteria for re-classifying contingency events	16
4.2.4	Secure operating state and power system security	17 16
4.2.5	Technical envelope	17
4.2.6	General principles for maintaining power system security	18
4.2.7	Reliable Operating State	19 18
4.2.8	Time for undertaking action	19
4.3	Power System Security Responsibilities and Obligations	19
4.3.1	Responsibility of NEMMCO for power system security	19
4.3.2	System security	21
4.3.3	The role of System Operators	24
4.3.4	Network Service Providers	25
4.3.5	Market Customer obligations	26
4.4	Power System Frequency Control	27 26
4.4.1	Power system frequency control responsibilities	27 26
4.4.2	Operational frequency control requirements	27 26
4.4.3	Generator protection requirements	27
4.5	Control of Power System Voltage	28 27
4.5.1	Power system voltage control	28 27
4.5.2	Reactive power reserve requirements	29 28
4.5.3	Audit and testing	29
4.6	Protection of Power System Equipment	29
4.6.1	Power system fault levels	29
4.6.2	Power system protection co-ordination	29
4.6.3	Audit and testing	30 29
4.6.4	Short-term thermal ratings of power system	30 29
4.6.5	Partial outage of power protection systems	30
4.7	Power System Stability Co-ordination	31 30
4.7.1	Stability analysis co-ordination	31 30
4.7.2	Audit and testing	31
4.8	Power System Security Operations	31

4.8.1	Registered Participants' advice	31
4.8.2	Protection or control system abnormality	31
4.8.3	NEMMCO's advice on power system emergency conditions	32 ³¹
4.8.4	Declaration of conditions	32
4.8.5	Managing declarations of conditions	33 ³²
4.8.5A	Determination of the latest time for NEMMCO intervention	33
4.8.5B	Notifications of last time of NEMMCO intervention	34
4.8.6	[Deleted]	35 ³⁴
4.8.7	Managing a power system contingency event	35 ³⁴
4.8.8	[Deleted]	35
4.8.9	Power to issue directions and clause 4.8.9 instructions	35
4.8.9A	System security directions	37
4.8.10	Disconnection of generating units and market network services	37
4.8.11	[Deleted]	38 ³⁷
4.8.12	System restart plan and local black system procedures	38 ³⁷
4.8.13	[Deleted]	39 ³⁸
4.8.14	Power system restoration	39
4.8.15	Review of operating incidents	39
4.9	Power System Security Related Market Operations	41
4.9.1	Load forecasting	41
4.9.2	Dispatch instructions to Scheduled Generators	43 ⁴²
4.9.2A	Dispatch Instructions to Scheduled Network Service Providers	43
4.9.3	Instructions to Registered Participants	44
4.9.3A	Ancillary services instructions	44
4.9.3B	Compliance with dispatch instructions	45
4.9.4	Dispatch related limitations on Scheduled Generators	45
4.9.4A	Dispatch related limitations on Scheduled Network Service Providers	46
4.9.5	Form of dispatch instructions	47 ⁴⁶
4.9.6	Commitment of scheduled generating units	47
4.9.7	De-commitment, or output reduction, by Scheduled Generators	48
4.9.8	General responsibilities of Registered Participants	49 ⁴⁸
4.9.9	Scheduled Generator plant changes	49
4.9.9A	Scheduled Network Service Provider plant changes	49
4.9.9B	Ancillary service plant changes	49
4.10	Power System Operating Procedures	50 ⁴⁹
4.10.1	Power system operating procedures	50 ⁴⁹
4.10.2	Transmission network operations	50
4.10.3	Operating interaction with distribution networks	51
4.10.4	Switching of a Distributor's high voltage networks	51

4.10.5	Switching of reactive power facilities	51
4.10.6	Automatic reclose	52 ⁵¹
4.10.7	Inspection of facilities by NEMMCO	52
4.11	Power System Security Support	52
4.11.1	Remote control and monitoring devices	52
4.11.2	Operational control and indication communication facilities	53
4.11.3	Power system voice/data operational communication facilities	54 ⁵³
4.11.4	Records of power system operational communication	55 ⁵⁴
4.11.5	Agent communications	55
4.12	Nomenclature Standards	56
4.13	Submission of Performance Standards	56
4.14	Acceptance of Performance Standards	57
4.15	Performance Standard Compliance	60 ⁵⁹
4.16	Transitioning arrangements for establishment of performance standards	62
4.16.1	Definitions	62
4.16.2	Exclusions	64
4.16.3	Notification and acceptance of performance standards	64
4.16.4	Actual capability	70 ⁶⁹
4.16.5	Criteria for, and negotiation of, performance standards	71 ⁷⁰
4.16.6	Consultation with and assistance by Network Service Providers	74 ⁷³
4.16.7	Referral to expert determination	74
4.16.8	Prior actions	75
4.16.9	Deemed performance standards	75
4.16.10	Modification of connection agreements	76 ⁷⁵
4.17	Expert determination	76
4.17.1	Performance standards committee and appointment of performance standards experts	76
4.17.2	Referral to performance standards expert	78 ⁷⁷
4.17.3	Determinations of performance standards experts	78
4.17.4	Other matters	80 ⁷⁹
9.	Jurisdictional Derogations and Transitional Arrangements	82
9.1	Purpose and Application	82
9.1.1	Purpose	82
9.1.2	Jurisdictional Derogations	82
9.2	[Deleted]	83
9.3	Definitions	83
9.3.1	General Definitions	83
9.3.2	Network Service Provider	86

9.4	Transitional Arrangements for Chapter 2 - Registered Participants, Registration and Cross Border Networks	89
9.4.1	[Deleted]	89
9.4.2	Smelter Trader	89
9.4.3	Smelter Trader: compliance	90
9.4.4	Report from AER	92
9.4.5	Cross Border Networks	93
9.5	[Deleted]	93
9.6	Transitional Arrangements for Chapter 4 - System Security	93
9.6.1	Operating Procedures (clause 4.10.1)	93
9.6.2	Nomenclature Standards (clause 4.12)	94
9.7	Transitional Arrangements for Chapter 5 - Network Connection	94
9.7.1	[Deleted]	94
9.7.2	Application for Connection	94
9.7.3	[Deleted]	95
9.7.4	Regulation of Distribution Network Connection	95
9.7.5	[Deleted]	97
9.7.6	[Deleted]	97
9.7.7	[Deleted]	97
9.8	Transitional Arrangements for Chapter 6 - Network Pricing	97
9.8.1	[Deleted]	97
9.8.2	[Deleted]	97
9.8.3	[Deleted]	97
9.8.4	Transmission Network Pricing	97
9.8.4A	Modification of Chapter 6A in its application to Victoria	98
9.8.4B	Transmission service revenues	98
9.8.4C	Transmission revenue regulatory regime for transmission services provided by VENCORP	99
9.8.4D	Information disclosure by VENCORP	101
9.8.4E	[Deleted]	102
9.8.4F	Pricing for connection to and use of Victorian transmission network	102
9.8.4G	Transitional provisions	104
9.8.5	Distribution Network Pricing – Victorian Jurisdictional Regulator	104
9.8.6	[Deleted]	104
9.8.7	Distribution network pricing – transitional application of former Chapter 6	104
9.8.8	Exclusion of AER's power to aggregate distribution systems and parts of distribution systems	106
9.9	Transitional Arrangements for Chapter 7 - Metering	106

9.9.1	Metering Installations To Which This Schedule Applies	106
9.9.2	[Deleted]	107
9.9.3	[Deleted]	107
9.9.4	[Deleted]	107
9.9.5	[Deleted]	107
9.9.6	[Deleted]	107
9.9.7	[Deleted]	107
9.9.8	[Deleted]	107
9.9.9	Periodic Energy Metering (clause 7.9.3)	107
9.9.10	Use of Alternate Technologies (clause 7.13)	107
9.9A	[Deleted]	107
	Schedule 9A1.1 – [Deleted]	108
	Schedule 9A1.2 – [Deleted]	108
	Schedule 9A1.3 – [Deleted]	108
	Schedule 9A2 – [Deleted]	108
	Schedule 9A3 – Jurisdictional Derogations Granted to Generators	109
1.	Interpretation of tables	109
2.	Continuing effect	109
3.	Subsequent agreement	109
4.	Additional services that may be required (clause S5.2.2 of schedule 5.2)	110
5.	Reactive Power Capability (clause S5.2.5.1 of schedule 5.2)	110
6.	Generating unit response to disturbances (clauses S5.2.5.3, S5.2.5.4 and S5.2.5.5 of schedule 5.2)	112
7.	Partial load rejection (clause S5.2.5.7 of schedule 5.2)	113
8.	[Deleted]	115
9.	[Deleted]	115
10.	Protection systems that impact on system security (clause S5.2.5.9 of schedule 5.2)	115
11.	Asynchronous operation (clause S5.2.5.10 of schedule 5.2)	117
12.	[Deleted]	117
13.	Governor Systems (load control) (clause S5.2.5.11 of schedule 5.2)	117
14.	Governor control equipment (clause S5.2.5.11 of schedule 5.2)	117
15.	Reactive current compensation (clause S5.2.5.13 schedule 5.2)	119
16.	Excitation Control System (clause S5.2.5.13 of schedule 5.2)	119
9.10	[Deleted]	120
9.11	Definitions	120
9.11.1	Definitions used in this Part B	120
9.12	Transitional Arrangements for Chapter 2 - Generators, Registered Participants, Registration and Cross Border Networks	122

9.12.1	Registration as a Generator	122
9.12.2	Customers	122
9.12.3	Power Traders	123
9.12.4	Cross Border Networks	126
9.13	[Deleted]	126
9.14	Transitional Arrangements for Chapter 4 - System Security	126
9.14.1	Power System Operating Procedures	126
9.15	Transitional Arrangements for Chapter 5 - Network Connection	126
9.15.1	[Deleted]	126
9.15.2	Disputes Relating to a NSW Distribution Network	126
9.16	Transitional Arrangements for Chapter 6 - Network Pricing	128
9.16.1	[Deleted]	128
9.16.2	[Deleted]	128
9.16.3	Jurisdictional Regulator	128
9.16.4	Deemed Regulated Interconnector	128
9.16.5	Revenue Cap	128
9.17	Transitional Arrangements for Chapter 7 - Metering	130
9.17.1	Extent of Derogations	130
9.17.2	Initial Registration (clause 7.1.2)	130
9.17.3	Amendments to Schedule 9G1	130
9.17.4	Compliance with AS/NZ ISO 9002 (clause S7.4.3(f) of schedule 7.4)	131
9.17A	[Deleted]	131
9.18	[Deleted]	131
9.19	[Deleted]	132
9.20	Definitions and Transitional Arrangements for Cross-Border Networks	132
9.20.1	Definitions	132
9.20.2	Cross Border Networks	132
9.21	[Deleted]	133
9.22	[Deleted]	133
9.23	Transitional Arrangements for Chapter 6 - Network Pricing	133
9.23.1	[Deleted]	133
9.23.2	[Deleted]	133
9.23.3	[Deleted]	133
9.23.4	[Deleted]	133
9.24	Transitional Arrangements	133
9.24.1	Chapter 7 - Metering	133
9.24.2	[Deleted]	133

9.24A	[Deleted]	133
9.25	Definitions	134
9.25.1	[Deleted]	134
9.25.2	Definitions	134
9.26	Transitional Arrangements for Chapter 2 - Registered Participants, Registration And Cross Border Networks	137
9.26.1	Registration as a Generator	137
9.26.2	Registration as a Customer	138
9.26.3	Cross Border Networks	138
9.26.4	[Deleted]	138
9.26.5	Registration as a Network Service Provider	138
9.27	[Deleted]	139
9.28	Transitional Arrangements for Chapter 5 - Network Connection	139
9.28.1	Application of clause 5.2	139
9.28.2	Regulation of Distribution Network Connection	140
9.28.3	System Planning	141
9.29	Transitional Arrangements for Chapter 6 - Economic Regulation of Distribution Services	142
9.29.1	Jurisdictional Regulator	142
9.29.2	[Deleted]	142
9.29.3	[Deleted]	142
9.29.4	[Deleted]	142
9.29.5	Distribution Network Pricing – South Australia	142
9.29.6	Capital contributions, prepayments and financial guarantees	144
9.29.7	Ring fencing	144
9.29A	Monitoring and reporting	144
9.30	Transitional Provisions	145
9.30.1	Chapter 7 - Metering	145
9.30.2	[Deleted]	145
Schedule 9D1 - [Deleted]		145
9.31	[Deleted]	146
9.32	Definitions and Interpretation	146
9.32.1	Definitions	146
9.32.2	Interpretation	148
9.33	Transitional Arrangements for Chapter 1	148
9.33.1	[Deleted]	148
9.34	Transitional Arrangements for Chapter 2 - Registered Participants and Registration	148
9.34.1	Application of the Rules in Queensland (clauses 2.2 and 2.5)	148

9.34.2	Stanwell Cross Border Leases (clause 2.2)	149
9.34.3	[Deleted]	149
9.34.4	Registration as a Customer (clause 2.3.1)	149
9.34.5	There is no clause 9.34.5	150
9.34.6	Exempted generation agreements (clause 2.2)	150
9.35	[Deleted]	155
9.36	[Deleted]	155
9.37	Transitional Arrangements for Chapter 5 - Network Connection	155
9.37.1	[Deleted]	155
9.37.2	Existing connection and access agreements (clause 5.2)	155
9.37.3	[Deleted]	156
9.37.4	Regulation of distribution network connection (clause 5.3)	156
9.37.5	Forecasts for connection points to transmission network (clause 5.6.1)	156
9.37.6	There is no clause 9.37.6	157
9.37.7	Cross Border Networks	157
9.37.8	[Deleted]	157
9.37.9	Credible contingency events (clause S5.1.2.1 of schedule 5.1)	157
9.37.10	Reactive power capability (clause S5.2.5.1 of schedule 5.2)	157
9.37.11	[Deleted]	159
9.37.12	Voltage fluctuations (clause S5.1.5 of schedule 5.1)	159
9.37.13	[Deleted]	161
9.37.14	[Deleted]	161
9.37.15	[Deleted]	161
9.37.16	[Deleted]	161
9.37.17	[Deleted]	161
9.37.18	[Deleted]	161
9.37.19	Generating unit response to disturbances (clause S5.2.5.3 of schedule 5.2)	161
9.37.20	Frequency control (clause S5.2.5.11 of schedule 5.2)	161
9.37.21	Excitation control system (clause S.5.2.5.13 of schedule 5.2)	162
9.37.22	[Deleted]	163
9.37.23	Annual forecast information for planning purposes (schedule 5.7)	163
9.38	Transitional Arrangements for Chapter 6 - Network Pricing	163
9.38.1	[Deleted]	163
9.38.2	[Deleted]	163
9.38.3	Arrangements for regulation of distribution pricing	163
9.38.4	Interconnectors between regions	164
9.38.5	Transmission pricing for exempted generation agreements	164

9.39	Transitional Arrangements for Chapter 7 - Metering	165
9.39.1	Metering installations to which this clause applies	165
9.39.2	[Deleted]	165
9.39.3	[Deleted]	165
9.39.4	[Deleted]	165
9.39.5	[Deleted]	165
9.40	Transitional Arrangements for Chapter 8 - Administration Functions	166
9.40.1	[Deleted]	166
9.40.2	[Deleted]	166
9.40.3	[Deleted]	166
9.41	[Deleted]	166
	Schedule 9E1 - Exempted Generation Agreements	167
9.41A	[Deleted]	169
9.42	Definitions and interpretation	169
9.42.1	Definitions	169
9.42.2	Interpretation	172
9.42.3	National grid, power system and related expressions	172
9.43	Transitional arrangements for Chapter 1 - Introduction - Validity of certain actions taken prior to Transition Date	172
9.44	Transitional arrangements for Chapter 2 – Registered Participants and Registration - Customers (clause 2.3.1(e))	173
9.45	Transitional arrangements for Chapter 3 - Market Rules	173
9.45.1	Tasmanian Region (clause 3.5)	173
9.45.2	Administered Price Cap (clause 3.14.1)	173
9.45.3	Settlement Residue Auctions (clause 3.18.1)	173
9.46	Transitional arrangements for Chapter 4 - Power System Security	174
9.46.1	Satisfactory Operating State (clause 4.2.2)	174
9.46.2	Secure operating state and power system security (clause 4.2.6(c))	174
9.46.3	Market Customer obligations (clause 4.3.5(b))	174
9.46.4	Power System Frequency Control Responsibilities (clause 4.4.1)	174
9.47	Transitional arrangements for Chapter 5- Network Connection	175
9.47.1	Existing Connection Agreements	175
9.47.2	[Deleted]	175
9.47.3	Frequency variations (clauses S5.1.3 and S5.1.10)	175
9.47.4	Fault clearance times (clauses S5.1.9 and S5.1a.8 and table S5.1a.2)	175

9.48	Transitional arrangements for Chapter 6 - Transmission and Distribution Pricing	176
9.48.1	[Deleted]	176
9.48.2	Transmission Service Pricing	176
9.48.3	Distribution Service Pricing – Jurisdictional Regulator	177
9.48.4	Distribution Service Pricing	178
9.48.4A	Ring fencing	178
9.48.4B	Uniformity of tariffs for small customers	178
9.48.5	Transmission network	178
9.48.6	Deemed regulated interconnector	179
9.49	Transitional arrangements for Chapter 8 - Administrative Functions	179
9.49.1	Frequency Standards (clause 8.8.1)	179
9.49.2	Termination of frequency derogations	179
9.49.3	Reliability Panel	179
9.49.4	Principles to be applied by Reliability Panel	180
	Schedule 9G1 - Metering Transitional Arrangements	181
1.	Introduction	181
2.	[Deleted]	181
3.	General Principle	181
4.	[Deleted]	181
5.	Accuracy Requirements	181
5.1	Existing Metering Installations Transitional Exemptions	181
5.2	[Deleted]	182
6.	[Deleted]	182
7.	[Deleted]	182
8.	[Deleted]	182
9.	[Deleted]	182
10.	[Deleted]	182
10.	GLOSSARY	184

CHAPTER 4

4. Power System Security

4.1 Introduction

4.1.1 Purpose

- (a) This Chapter:
- (1) provides the framework for achieving and maintaining a secure *power system*;
 - (2) provides the conditions under which *NEMMCO* can intervene in the processes of the *spot market* and issue *directions* to *Registered Participants* so as to maintain or re-establish a secure and reliable *power system*;
 - (3) has the following aims:
 - (i) to detail the principles and guidelines for achieving and maintaining *power system security*;
 - (ii) to establish the processes for the assessment of the adequacy of *power system reserves*;
 - (iii) to establish processes to enable *NEMMCO* to plan and conduct operations within the *power system* to achieve and maintain *power system security*; and
 - (iv) to establish processes for the actual *dispatch* of *scheduled generating units*, *scheduled loads*, *scheduled network services* and *ancillary services* by *NEMMCO*.
- (b) By virtue of this Chapter and the *National Electricity Law*, *NEMMCO* has responsibility to maintain and improve *power system security*. This Chapter also requires the *Jurisdictional System Security Coordinator* for each *participating jurisdiction* to advise *NEMMCO* of the requirements of the *participating jurisdiction* regarding *sensitive loads* and priority of *load shedding* and requires *NEMMCO* to provide copies of the relevant *load shedding procedures* to the *Jurisdictional System Security Coordinator*.

4.2 Definitions and Principles

This rule sets out certain definitions and concepts that are relevant to this Chapter.

4.2.1 [Deleted]

4.2.2 Satisfactory Operating State

The *power system* is defined as being in a *satisfactory operating state* when:

- (a) the *frequency* at all energised *busbars* of the *power system* is within the *normal operating frequency band*, except for brief excursions outside the *normal operating frequency band* but within the *normal operating frequency excursion band*;
- (b) the *voltage* magnitudes at all energised *busbars* at any *switchyard* or *substation* of the *power system* are within the relevant limits set by the relevant *Network Service Providers* in accordance with clause S5.1.4 of schedule 5.1;
- (c) the current flows on all *transmission lines* of the *power system* are within the ratings (accounting for time dependency in the case of emergency ratings) as defined by the relevant *Network Service Providers* in accordance with schedule 5.1;
- (d) all other *plant* forming part of or impacting on the *power system* is being operated within the relevant operating ratings (accounting for time dependency in the case of emergency ratings) as defined by the relevant *Network Service Providers* in accordance with schedule 5.1;
- (e) the configuration of the *power system* is such that the severity of any potential fault is within the capability of circuit breakers to *disconnect* the faulted circuit or equipment; and
- (f) the conditions of the *power system* are stable in accordance with requirements designated in or under clause S5.1.8 of schedule 5.1.

4.2.3 Credible and non-credible contingency events

- (a) A “*contingency event*” means an event affecting the *power system* which *NEMMCO* expects would be likely to involve the failure or removal from operational service of one or more *generating units* and/or *transmission elements* ~~a *generating unit* or *transmission element*~~.
- (b) A “*credible contingency event*” means a *contingency event* the occurrence of which *NEMMCO* considers to be reasonably possible in the surrounding circumstances including the *technical envelope*. Without limitation, examples of *credible contingency events* are likely to include:
 - (1) the unexpected automatic or manual *disconnection* of, or the unplanned reduction in capacity of, one operating *generating unit*; or
 - (2) the unexpected *disconnection* of one major item of *transmission plant* (e.g. *transmission line*, *transformer* or *reactive plant*) other than as a result of a three phase electrical fault anywhere on the *power system*.
- (c) ~~[Deleted] A “*single credible contingency event*” means an individual *credible contingency event* for which a *Registered Participant* adversely affected by the event would reasonably expect, under normal conditions, the design or operation of the relevant part of the *power system* would~~

~~adequately cater, so as to avoid significant disruption to power system security.~~

- (d) ~~[Deleted] The “critical single credible contingency event” at any particular time is the single credible contingency event considered by NEMMCO, in the particular circumstances, to have the potential for the most significant impact on the power system at that time. This would generally be the instantaneous loss of the largest generating unit on the power system. Alternatively, it might be the loss of any interconnection under abnormal conditions.~~
- (e) A “non-credible contingency event” is a contingency event other than a credible contingency event. Without limitation, examples of non-credible contingency events are likely to include:
- (1) three phase electrical faults on the power system; or
 - (2) simultaneous disruptive events such as:
 - (i) multiple generating unit failures; or
 - (ii) double circuit transmission line failure (such as may be caused by tower collapse).
- (f) ~~[Deleted] Abnormal conditions are conditions posing added risks to the power system including, without limitation, severe weather conditions, lightning, storms, and bush fires. During such conditions, NEMMCO may, in its reasonable opinion, determine a non-credible contingency event (in particular, but without limitation, the tripping of some substation or switchyard busbars or both circuits of a double circuit transmission line) to be a credible contingency event. NEMMCO must notify all Market Participants of such a re-classification as soon as practicable.~~

4.2.3A Re-classifying contingency events

- (a) Abnormal conditions are conditions posing added risks to the power system including, without limitation, severe weather conditions, lightning, storms, and bush fires.
- (b) NEMMCO must take all reasonable steps to ensure that it is promptly informed of abnormal conditions, and when abnormal conditions are known to exist NEMMCO must:
- (1) on a regular basis, make reasonable attempts to obtain all information relating to how the abnormal conditions may affect a contingency event; and
 - (2) identify any non-credible contingency event the occurrence of which is made more likely by the existence of the abnormal conditions.

- (c) As soon as practicable after NEMMCO identifies a non-credible contingency event in accordance with clause 4.2.3A(b), NEMMCO must provide Market Participants with a notification specifying:
- (1) the abnormal conditions;
 - (2) the relevant non-credible contingency event;
 - (3) whether NEMMCO has reclassified this event as a credible contingency event under clause 4.2.3A(g);
 - (4) information in its possession that is relevant to its consideration under clause 4.2.3A(e), the source of that information and the time that information was received or confirmed by NEMMCO;
 - (5) the time at which the notification has been issued; and
 - (6) the time at which an updated notification is expected to be issued, where this might be necessary.
- (d) NEMMCO must update a notification issued in accordance with clause 4.2.3A(c) as it becomes aware of new information that is material to the assessment under clause 4.2.3A(e), and in any event no later than the time indicated in the original notification pursuant to clause 4.2.3A(c)(6), until such time as it issues a notification specifying that the abnormal conditions have ceased to have a material effect on the likely occurrence of the non-credible contingency event.
- (e) If NEMMCO identifies a non-credible contingency event in accordance with clause 4.2.3A(b) it must, on a regular basis, consider whether the occurrence of the non-credible contingency event is reasonably possible, having regard to all the facts and circumstances identified in accordance with clause 4.2.3A(b).
- (f) In undertaking its consideration in accordance with clause 4.2.3A(e) NEMMCO must have regard to criteria referred to in clause 4.2.3B.
- Note: Clause 4.2.3A(f) will not come into effect until NEMMCO has established the criteria referred to in clause 4.2.3B.
- (g) If, after undertaking a consideration in accordance with clause 4.2.3A(e), NEMMCO considers that the abnormal conditions make the occurrence of a non-credible contingency event reasonably possible, it must reclassify that event to be a credible contingency event and must notify Market Participants as soon as practicable.
- (h) If, after reclassifying a non-credible contingency event to be a credible contingency event in accordance with clause 4.2.3A(g), NEMMCO considers that the relevant facts and circumstances have changed so that the occurrence of that contingency event is no longer reasonably possible, NEMMCO may reclassify that event to be a non-credible contingency event.

If NEMMCO does so, it must notify *Market Participants* as soon as practicable.

- (i) Every six months, NEMMCO must issue a report setting out its reasons for all decisions to re-classify *non-credible contingency events* to be *credible contingency events* under clause 4.2.3A(g) during the relevant period, which:
 - (1) must include an explanation of how NEMMCO applied the criteria established in accordance with clause 4.2.3B for each of those decisions; and
 - (2) may also include NEMMCO's analysis of reclassification trends during the relevant period and its appraisal of the appropriateness and effectiveness of the relevant criteria that were applied in the case of each re-classification decision.

4.2.3B Criteria for re-classifying contingency events

- (a) Within six months of the commencement of this clause, NEMMCO must establish criteria that it must use when considering whether *abnormal conditions* make the occurrence of a *non-credible contingency event* reasonably possible under clause 4.2.3A(g). NEMMCO must:
 - (1) establish the criteria following consultation with relevant stakeholders including *Market Participants*, *Transmission Network Service Providers*, *Jurisdictional System Security Coordinators* and relevant emergency services;
 - (2) ensure that the criteria include a requirement to have regard to the particulars of any risk(s) to the *power system* associated with the various types of *abnormal conditions* that might arise; and
 - (3) publish the criteria on its website as soon as practicable after the criteria have been established.
- (b) NEMMCO must review the criteria established in accordance with clause 4.2.3B(a) every two years. NEMMCO must undertake the review following consultation with relevant stakeholders including *Market Participants*, *Transmission Network Service Providers*, *Jurisdictional System Security Coordinators* and relevant emergency services.
- (c) NEMMCO may amend the criteria established under clause 4.2.3B(a) following consultation with relevant stakeholders including *Market Participants*, *Transmission Network Service Providers*, *Jurisdictional System Security Coordinators* and relevant emergency services. Consultation under clause 4.2.3B will suffice for the purposes of this clause.

4.2.4 Secure operating state and power system security

- (a) The *power system* is defined to be in a *secure operating state* if, in *NEMMCO's* reasonable opinion, taking into consideration the appropriate *power system security* principles described in clause 4.2.6:
- (1) the *power system* is in a *satisfactory operating state*; and
 - (2) the *power system* will return to a *satisfactory operating state* following the occurrence of any credible contingency event ~~a single credible contingency event~~ in accordance with the *power system security and reliability standards*.
- (b) Without limitation, in forming the opinions described in clause 4.2.4(a), *NEMMCO* must:
- (1) consider the impact of each of the potentially *constrained interconnectors*; and
 - (2) use the *technical envelope* as the basis of determining events considered to be *credible contingency events* at that time.

4.2.5 Technical envelope

- (a) The *technical envelope* means the technical boundary limits of the *power system* for achieving and maintaining the *secure operating state* of the *power system* for a given demand and *power system* scenario.
- (b) *NEMMCO* must determine and revise the *technical envelope* (as may be necessary from time to time) by taking into account the prevailing *power system* and *plant* conditions as described in clause 4.2.5(c).
- (c) In determining and revising the *technical envelope* *NEMMCO* must take into account matters such as:
- (1) *NEMMCO's* forecast of total *power system load*;
 - (2) the provision of the applicable *contingency capacity reserves*;
 - (3) operation within all *plant* capabilities of *plant* on the *power system*;
 - (4) *contingency capacity reserves* available to handle any credible contingency event ~~a single credible contingency event~~;
 - (5) advised *generation* minimum load constraints;
 - (6) *constraints* on *transmission networks*, including short term limitations;
 - (7) *ancillary service* requirements;

- (8) **[Deleted]**
 - (9) the existence of proposals for any major equipment or *plant* testing, including the checking of, or possible changes in, *transmission plant* availability; and
 - (10) applicable *performance standards*.
- (d) NEMMCO must, when determining the secure operating limits of the *power system*, assume that the applicable *performance standards* are being met, subject to:
- (1) a *Registered Participant* notifying NEMMCO, in accordance with rule 4.15(f), that a *performance standard* is not being met; or
 - (2) NEMMCO otherwise becoming aware that a *performance standard* is not being met.

4.2.6 General principles for maintaining power system security

The *power system security* principles are as follows:

- (a) To the extent practicable, the *power system* should be operated such that it is and will remain in a *secure operating state*.
- (b) Following a *contingency event* (whether or not a *credible contingency event*) or a significant change in *power system* conditions, NEMMCO should take all reasonable actions:
 - (1) to adjust, wherever possible, the operating conditions with a view to returning the *power system* to a *secure operating state* as soon as it is practical to do so, and, in any event, within thirty minutes; or
 - (2) if any principles and guidelines have been *published* under clause 8.8.1(a)(2a), to adjust, wherever possible, the operating conditions, in accordance with such principles and guidelines, with a view to returning the *power system* to a *secure operating state* within at most thirty minutes.
- (c) Adequate *load shedding* facilities initiated automatically by *frequency* conditions outside the *normal operating frequency excursion band* should be available and in service to restore the *power system* to a *satisfactory operating state* following significant multiple *contingency events*.
- (d) **[Deleted]**
- (e) Sufficient *system restart ancillary services* should be available in accordance with the *system restart standard* to allow the restoration of *power system security* and any necessary restarting of *generating units* following a *major supply disruption*.

4.2.7 Reliable Operating State

The *power system* is assessed to be in a *reliable operating state* when:

- (a) *NEMMCO* has not *disconnected*, and does not expect to *disconnect*, any points of *load connection* under clause 4.8.9;
- (b) no *load shedding* is occurring or expected to occur anywhere on the *power system* under clause 4.8.9; and
- (c) in *NEMMCO's* reasonable opinion the levels of *short term* and *medium term capacity reserves* available to the *power system* are at least equal to the required levels determined in accordance with the *power system security and reliability standards*.

4.2.8 Time for undertaking action

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

4.3 Power System Security Responsibilities and Obligations

4.3.1 Responsibility of NEMMCO for power system security

The *NEMMCO power system security responsibilities* are:

- (a) to maintain *power system security*;
- (b) to monitor the operating status of the *power system*;
- (c) to co-ordinate the *System Operators* in undertaking certain of its activities and operations and monitoring activities of the *power system*;
- (d) to ensure that *high voltage* switching procedures and arrangements are utilised by *Network Service Providers* to provide adequate protection of the *power system*;
- (e) to assess potential infringement of the *technical envelope* or *power system operating procedures* which could affect the security of the *power system*;
- (f) to ensure that the *power system* is operated within the limits of the *technical envelope*;
- (g) to ensure that all *plant* and equipment under its control or co-ordination is operated within the appropriate operational or emergency limits which are advised to *NEMMCO* by the respective *Network Service Providers* or *Registered Participants*;
- (h) to assess the impacts of technical and any operational *plant* on the operation of the *power system*;

- (i) to arrange the *dispatch* of *scheduled generating units*, *scheduled loads*, *scheduled network services* and *ancillary services* (including *dispatch* by remote control actions or specific directions) in accordance with the *Rules*, allowing for the dynamic nature of the *technical envelope*;
- (j) to determine any potential *constraint* on the *dispatch* of *generating units*, *loads*, *market network services* and *ancillary services* and to assess the effect of this *constraint* on the maintenance of *power system security*;
- (k) to assess the availability and adequacy, including the dynamic response, of *contingency capacity reserves* and *reactive power reserves* in accordance with the *power system security and reliability standards* and to ensure that appropriate levels of *contingency capacity reserves* and *reactive power reserves* are available:
 - (1) to ensure the *power system* is, and is maintained, in a *satisfactory operating state*; and
 - (2) to arrest the impacts of a range of significant multiple *contingency events* (affecting up to 60% of the total *power system load*) to allow a prompt restoration or recovery of *power system security*, taking into account under-frequency initiated *load shedding* capability provided under *connection agreements* or otherwise;
- (l) to determine the required levels of *short term capacity reserves* and *medium term capacity reserves* in accordance with the *power system security and reliability standards*, and to assess the availability of the actual *short term capacity reserve* and actual *medium term capacity reserve* in accordance with the *projected assessment of system adequacy (PASA)*, described in Chapter 3, which would be available to supplement utilised *contingency capacity reserves* and, if necessary, initiate action in relation to a *relevant NEMMCO intervention event*;
- (m) to make available to *Registered Participants* as appropriate, information about the potential for, or the occurrence of, a situation which could significantly impact, or is significantly impacting, on *power system security*, and advise of any *low reserve* condition for the relevant periods where the *short term capacity reserve* and/or *medium term capacity reserve* is assessed as being less than that determined in accordance with the *short term capacity reserve standard* or *medium term capacity reserve standard* respectively;
- (n) to refer to *Registered Participants*, as *NEMMCO* deems appropriate, information of which *NEMMCO* becomes aware in relation to significant risks to the *power system* where actions to achieve a resolution of those risks are outside the responsibility or control of *NEMMCO*;
- (o) to utilise resources and services provided or procured as *ancillary services* or otherwise to maintain or restore the *satisfactory operating state* of the *power system*;

- (p) to procure adequate *system restart ancillary services* in accordance with clause 3.11.4A to enable *NEMMCO* to co-ordinate a response to a *major supply disruption*;
- (q) to interrupt, subject to clause 4.3.2(1), *Registered Participant connections* as necessary during emergency situations to facilitate the re-establishment of the *satisfactory operating state* of the *power system*;
- (r) to issue a *direction* or *clause 4.8.9 instruction* (as necessary) to any *Registered Participant*;
- (s) to co-ordinate and direct any rotation of widespread interruption of demand in the event of a major *supply* shortfall or disruption;
- (t) to liaise with *participating jurisdictions* should there be a need to manage an extensive disruption, including the use of emergency services powers in a *participating jurisdiction*;
- (u) to determine the extent to which the levels of *contingency capacity reserves* and *reactive power reserves* are or were appropriate through appropriate testing, auditing and simulation studies;
- (v) to investigate and review all major *power system* operational incidents and to initiate action plans to manage any abnormal situations or significant deficiencies which could reasonably threaten *power system security*. Such situations or deficiencies include without limitation:
 - (1) *power system frequencies* outside those specified in the definition of *satisfactory operating state*;
 - (2) *power system voltages* outside those specified in the definition of *satisfactory operating state*;
 - (3) actual or potential *power system* instability; and
 - (4) unplanned/unexpected operation of major *power system* equipment; and
- (w) to ensure that each *System Operator* satisfactorily interacts with *NEMMCO*, other *System Operators* and *Distribution System Operators* for both *transmission* and *distribution network* activities and operations, so that *power system security* is not jeopardised by operations on the *connected transmission networks* and *distribution networks*.

4.3.2 System security

- (a) *NEMMCO* must use its reasonable endeavours, as permitted under the *Rules*, including through the provision of appropriate information to *Registered Participants* to the extent permitted by law and under the *Rules*, to achieve the *NEMMCO power system security responsibilities* in

accordance with the *power system security* principles described in clause 4.2.6.

- (b) Where an obligation is imposed on *NEMMCO* under this Chapter to arrange or control any act, matter or thing or to ensure that any other person undertakes or refrains from any act, that obligation is limited to a requirement for *NEMMCO* to use reasonable endeavours as permitted under the *Rules*, including to give such directions as are within its powers, to comply with that obligation.
- (c) If *NEMMCO* fails to arrange or control any act, matter or thing or the acts of any other person notwithstanding the use of *NEMMCO's* reasonable endeavours, *NEMMCO* will not be taken to have breached such obligation.
- (d) *NEMMCO* must make accessible to *Registered Participants* such information as:
 - (1) *NEMMCO* considers appropriate;
 - (2) *NEMMCO* is permitted to disclose in order to assist *Registered Participants* to make appropriate *market* decisions; and
 - (3) *NEMMCO* is able to disclose to enable *Registered Participants* to consider initiating procedures to manage the potential risk of any necessary action by *NEMMCO* to restore or maintain *power system security*,

provided that, in doing so, *NEMMCO* must use reasonable endeavours to ensure that such information is available to those *Registered Participants* who request the information on equivalent bases.

- (e) The *Jurisdictional System Security Coordinator* for a *participating jurisdiction* may nominate an individual to be the principal point of contact with *NEMMCO* for the *Jurisdictional System Security Coordinator*.
- (f) The *Jurisdictional System Security Coordinator* for each *participating jurisdiction* must provide *NEMMCO* with:
 - (1) a schedule of *sensitive loads* in that jurisdiction, specifying:
 - (i) the priority, in terms of security of *supply*, that each *load* specified in the schedule has over the other *loads* specified in the schedule; and
 - (ii) the *loads* (if any) for which the approval of the *Jurisdictional System Security Coordinator* must be obtained by *NEMMCO* under clause 4.3.2(1) before *NEMMCO* can interrupt *supply* to, or prevent reconnection of, that *load*: and

-
- (2) a schedule setting out the order in which *loads* in the *participating jurisdiction*, other than *sensitive loads*, may be shed by NEMMCO for the purposes of undertaking any *load shedding* under rule 4.8.
- (g) A *Jurisdictional System Security Coordinator* may from time to time amend the schedules provided to NEMMCO under clause 4.3.2(f) and must provide to NEMMCO a copy of the amended schedules.
- (h) NEMMCO must develop, update and maintain a set of procedures for each *participating jurisdiction* under which *loads* will be shed and restored in accordance with the priorities set out in the schedules for that *participating jurisdiction* (which procedures for a *participating jurisdiction* shall be known as the "*load shedding procedures*" for that jurisdiction).
- (i) NEMMCO must provide the *Jurisdictional System Security Coordinator* for a *participating jurisdiction* with a copy of the *load shedding procedures* for that *participating jurisdiction*, as amended from time to time.
- (j) The *load shedding procedures* for a *participating jurisdiction* must be consistent with the schedules of the *participating jurisdiction* provided under clause 4.3.2(f) and must, without limitation, include a requirement that:
- (1) automatic *disconnection* of a *sensitive load* under clause 4.3.5(a) is not to occur until the occurrence of a specified *power system frequency* referred to in the *load shedding procedures*;
 - (2) any such *sensitive load* (or part thereof) which would otherwise have been part of a block of *interruptible load* in an under-frequency band specified in clause 4.3.5(b), must be replaced in that band in relation to the *participating jurisdiction* with an equivalent amount of *interruptible load* nominated by other *Market Customers* in the relevant *participating jurisdiction*;
 - (3) after *supply* is interrupted to a *load*, *supply* to that *load* must be restored as soon as this can be achieved and in accordance with the schedules of *loads* referred to in clause 4.3.2(f); and
 - (4) in the event of a major *supply* shortfall, the rotation of any *load shedding* requirements within *regions* (or parts of *regions*) in the *participating jurisdiction* must be in accordance with the *load shedding procedures*.

- (k) Notwithstanding any other provision of the *Rules*, *NEMMCO* must use its reasonable endeavours to ensure that the *power system* is operated in a manner that maintains security of *supply* to any *sensitive loads* prescribed by the *Jurisdictional System Security Coordinator* for each *participating jurisdiction* under clause 4.3.2(f).
- (l) (1) Notwithstanding any other provision of the *Rules*, in the event that *NEMMCO*, in its reasonable opinion for reasons of public safety or for *power system security*, needs to interrupt *supply* to any *sensitive loads*, *NEMMCO* may only give a direction requiring that interruption:
 - (i) in accordance with the *load shedding procedures*; and
 - (ii) if it is a *sensitive load* of a type described in clause 4.3.2(f)(1)(ii), once the *Jurisdictional System Security Coordinator* for the relevant *participating jurisdiction* has given *NEMMCO* its approval (which approval must not be unreasonably withheld).
- (2) Other than to ensure the maintenance of *power system security* or public safety, after *disconnection*, notwithstanding any other provision of the *Rules*, *NEMMCO* must not take any steps to prevent the reconnection of a *sensitive load* of the type described in clause 4.3.2(f)(1)(ii) without the approval of the *Jurisdictional System Security Coordinator* for the relevant *participating jurisdiction* (which approval must not be unreasonably withheld).

4.3.3 The role of System Operators

- (a) For the purpose of complying with its obligations under clause 4.3.2, *NEMMCO* may, from time to time, in addition to any other power or right under the *Rules*:
 - (1) engage such agents or appoint such delegates as it considers appropriate to carry out on its behalf some or all of its rights, functions and obligations under this Chapter (such persons being known as “*System Operators*” upon registration with *NEMMCO*); and
 - (2) organise, enter into and manage any contractual arrangements with appropriately competent service providers.
- (b) *NEMMCO* must make accessible to *Registered Participants* information as to:
 - (1) the engagement or appointment of any agent, delegate or service provider under clause 4.3.3;
 - (2) the identity of that agent, delegate or service provider; and

- (3) the scope of the engagement or appointment, including without limitation, the activities in relation to which the engagement or appointment applies.
- (c) A *Registered Participant* must ensure that, where *NEMMCO* has engaged or appointed an agent, delegate or service provider under clause 4.3.3 in relation to certain of its rights, functions or obligations, any communications from the *Registered Participant* to *NEMMCO* under this Chapter concerning the rights, functions or obligations within the scope of the agent's, delegate's or service provider's engagement or appointment are made through that agent, delegate or service provider to the extent notified to the *Registered Participant* by *NEMMCO*.
- (d) A *System Operator* must carry out the rights, functions and obligations in respect of which it has been engaged or appointed by *NEMMCO* in accordance with the provisions of the *Rules*.
- (e) A *System Operator* must, to the extent that the *System Operator* is aware or ought reasonably to have been aware, keep *NEMMCO* fully and timely informed as to:
 - (1) the state of the security of the *power system*;
 - (2) any present or anticipated risks to *power system security*; and
 - (3) any action contemplated or initiated to address a risk to *power system security* or to restore or maintain the *power system* in a *satisfactory operating state*.
- (f) *NEMMCO* must ensure that any agent engaged, or delegate appointed, under clause 4.3.3(a)(1) is registered by it as a *System Operator*.
- (g) Notwithstanding that *NEMMCO* may have engaged or appointed an agent, delegate or service provider under clause 4.3.3 to carry out a right, function or obligation of *NEMMCO*, *NEMMCO* remains liable under the *Rules* for performance of that right, function or obligation.

4.3.4 Network Service Providers

- (a) Each *Network Service Provider* must use reasonable endeavours to exercise its rights and obligations in relation to its *networks* so as to co-operate with and assist *NEMMCO* in the proper discharge of the *NEMMCO power system security responsibilities*.
- (b) Each *Network Service Provider* must use reasonable endeavours to ensure that *interruption loads* are provided as specified in clause 4.3.5 and clause S5.1.10 of schedule 5.1 (including without limitation, through the inclusion of appropriate provisions in *connection agreements*).

- (c) Each *Network Service Provider* must arrange and maintain, in accordance with the standards described in clause 4.3.4(e), controls, monitoring and secure communication systems to facilitate a manually initiated, rotational *load shedding* and restoration process which may be necessary if there is, in *NEMMCO's* opinion, a prolonged major *supply* shortage or extreme *power system* disruption.
- (d) Each *Network Service Provider* must advise *NEMMCO* of any *ancillary services* or similar services provided under any *connection agreement* to which it is a party.
- (e) *NEMMCO* must develop, and may amend, standards in consultation with *Network Service Providers* in accordance with the *Rules consultation procedures* which must be met by *Network Service Providers* in arranging and maintaining the controls, monitoring and secure communication systems referred to in clause 4.3.4(c).
- (f) Until the standards contemplated by clause 4.3.4(e) are issued by *NEMMCO*, each *Network Service Provider* must maintain the control, monitoring and secure communication systems referred to in clause 4.3.4(c) that were in place at 13 December 1998 so as to achieve substantially the same performance and functionality as they did over the 12 months prior to 13 December 1998.
- (g) Each *Network Service Provider* must plan or operate its *transmission system* or *distribution system* in accordance with the *power system* stability guidelines described in clause 4.3.4(h).
- (h) *NEMMCO* must develop, and may amend, guidelines for *power system* stability but only in consultation with *Registered Participants* in accordance with the *Rules consultation procedures*, and must *publish* the guidelines for *power system* stability.
- (i) The *power system* stability guidelines developed in accordance with clause 4.3.4(h) must detail the policies governing *power system* stability so as to facilitate the operation of the *power system* within stable limits.

4.3.5 Market Customer obligations

- (a) All *Market Customers* having expected peak demands at *connection points* in excess of 10 MW, must provide automatic *interruptible load* of the type described in clause S5.1.10 of schedule 5.1. The level of this automatic *interruptible load* must be a minimum of 60% of their expected demand, or such other minimum *interruptible load* level as may be periodically determined by the *Reliability Panel*, to be progressively automatically *disconnected* following the occurrence of a *power system* under-frequency condition described in the *power system* security and reliability standards.

- (b) *Market Customers* must provide their *interruptible load* in manageable blocks spread over a number of steps within under-frequency bands from 49.0 Hz down to 47.0 Hz as nominated by *NEMMCO*.
- (c) Any *load shedding* capability the subject of an *ancillary services agreement* or *enabled* as a *market ancillary service* can be counted as automatic *interruptible load* provided for the purposes of clause 4.3.5.

4.4 Power System Frequency Control

4.4.1 Power system frequency control responsibilities

NEMMCO must use its reasonable endeavours to:

- (a) control the *power system frequency*; and
- (b) ensure that the *frequency operating standards* set out in the *power system security and reliability standards* are achieved.

4.4.2 Operational frequency control requirements

To assist in the effective control of *power system frequency* by *NEMMCO* the following provisions apply:

- (a) *NEMMCO* may give *dispatch instructions* in respect of *scheduled generating units, scheduled loads, scheduled network services* and *market ancillary services* pursuant to rule 4.9.
- (b) Each *Generator* must ensure that all of its *generating units* have responsive *speed governor systems* in accordance with the requirements of schedule 5.2, so as to automatically share in changes in *power system demand* or loss of *generation* as it occurs through response to the resulting excursion in *power system frequency*.
- (c) *NEMMCO* must use its reasonable endeavours to arrange to be available and specifically allocated to *regulating duty* such *generating plant* as *NEMMCO* considers appropriate which can be automatically controlled or directed by *NEMMCO* to ensure that all normal *load* variations do not result in *frequency* deviations outside the limitations specified in clause 4.2.2(a).
- (d) **[Deleted]**
- (e) *NEMMCO* must use its reasonable endeavours to ensure that adequate *facilities* are available and are under the direction of *NEMMCO* to allow the managed recovery of the *satisfactory operating state* of the *power system*.

4.4.3 Generator protection requirements

Generators must, in accordance with schedule 5.2 and Chapter 5, provide any necessary automatically initiated protective device or systems to protect their

plant and associated facilities against abnormal voltage and extreme frequency excursions of the power system.

4.5 Control of Power System Voltage

4.5.1 Power system voltage control

- (a) *NEMMCO* must determine the adequacy of the capacity of the *power system* to produce or absorb *reactive power* in the control of the *power system voltages*.
- (b) *NEMMCO*, in consultation with *Network Service Providers*, must assess and determine the limits of the operation of the *power system* associated with the avoidance of *voltage failure or collapse* under *any credible contingency event scenario* ~~*single credible contingency event scenarios*~~.
- (c) The limits of operation of the *power system* must be translated by *NEMMCO*, in consultation with *Network Service Providers*, into key location operational *voltage* settings or limits, *transmission line* capacity limits, *reactive power* production (or absorption) capacity or other appropriate limits to enable their use by *NEMMCO* in the maintenance of *power system security*.
- (d) The determination referred to in clause 4.5.1(b) must include a review of the dynamic stability of the *voltage* of the *power system*.
- (e) *NEMMCO* must use its reasonable endeavours to maintain *voltage* conditions throughout the *power system* so that the *power system* remains in a *satisfactory operating state*.
- (f) *NEMMCO* must use its reasonable endeavours to arrange the provision of *reactive power facilities* and *power system voltage stabilising facilities* through:
 - (1) contractual arrangements for *ancillary services* with appropriate *Registered Participants* in accordance with rule 3.11;
 - (2) negotiation and agreement with appropriate *Network Service Providers*; or
 - (3) obligations on the part of *Registered Participants* under their *connection agreements* in accordance with clause 3.11.4(b)(1).
- (g) Without limitation, such *reactive power facilities* may include:
 - (1) *synchronous generator voltage controls* (rotor current adjustment) usually associated with *tap-changing transformers*;
 - (2) *synchronous condensers* (compensators);

- (3) *static VAR compensators (SVC);*
- (4) *shunt capacitors;*
- (5) *shunt reactors.*

4.5.2 Reactive power reserve requirements

- (a) *NEMMCO must use its reasonable endeavours to ensure that sufficient reactive power reserve is available at all times to maintain or restore the power system to a satisfactory operating state after the most critical contingency event as determined by previous analysis or by periodic contingency analysis by NEMMCO.*
- (b) *If voltages are outside acceptable limits, and the means of voltage control set out in this rule 4.5 are exhausted, NEMMCO must take all reasonable actions, including to direct changes to demand (through selective load shedding from the power system), additional generation operation or reduction in the transmission line flows but only to the extent necessary to restore the voltages to within the relevant limits. A Registered Participant must comply with any such direction.*

4.5.3 Audit and testing

NEMMCO must arrange, co-ordinate and supervise the conduct of appropriate tests to assess the availability and adequacy of the provision of reactive power to control and maintain power system voltages under both satisfactory operating state and contingency event conditions.

4.6 Protection of Power System Equipment

4.6.1 Power system fault levels

- (a) *NEMMCO, in consultation with Network Service Providers, must determine the fault levels at all busbars of the power system as described in clause 4.6.1(b).*
- (b) *NEMMCO must ensure that there are processes in place, which will allow the determination of fault levels for normal operation of the power system and in anticipation of all credible contingency events that NEMMCO considers may affect the configuration of the power system, so that NEMMCO can identify any busbar which could potentially be exposed to a fault level which exceeds the fault current ratings of the circuit breakers associated with that busbar.*

4.6.2 Power system protection co-ordination

NEMMCO must use its reasonable endeavours to co-ordinate, in consultation with the Network Service Providers, the protection of transmission system plant

and equipment that *NEMMCO* reasonably considers could affect *power system security*.

4.6.3 Audit and testing

NEMMCO must use its reasonable endeavours to co-ordinate such inspections and tests as *NEMMCO* thinks appropriate to ensure that the protection of the *power system* is adequate to protect against damage to *power system plant* and equipment.

4.6.4 Short-term thermal ratings of power system

- (a) *NEMMCO* may act so as to use, or require or recommend actions which use, the full extent of the thermal ratings of *transmission elements* to maintain *power system security*, including the short-term ratings (being time dependent ratings), as defined by the *Network Service Providers* from time to time.
- (b) *NEMMCO* must use its reasonable endeavours not to exceed the ratings defined by the *Network Service Providers* and not to require or recommend action which causes those ratings to be exceeded, to the extent that *NEMMCO* is or ought reasonably to be aware of such ratings.

4.6.5 Partial outage of power protection systems

- (a) Where there is an *outage* of one *protection system* of a *transmission line*, *NEMMCO* must determine, in consultation with the relevant *Network Service Provider*, the most appropriate action. Depending on the circumstances the determination may be:
 - (1) to leave the *transmission element* in service for a limited duration;
 - (2) to take the *transmission element* out of service immediately;
 - (3) to install a temporary *protection system*;
 - (4) to accept a degraded performance from the *protection system*, with or without additional operational measures or temporary protection measures to minimise *power system* impact; or
 - (5) to operate the *transmission element* at a lower capacity.
- (b) If there is an *outage* of both *protection systems* on a *transmission line* and *NEMMCO* determines this to be an unacceptable risk to *power system security*, *NEMMCO* must take the *transmission element* out of service as soon as possible and advise the appropriate *Network Service Provider* immediately this action is undertaken.
- (c) The *Network Service Provider* must comply with a determination made by *NEMMCO* under this clause 4.6.5 unless, in the reasonable opinion of the

Network Service Provider, it would threaten the safety of any person or cause material damage.

4.7 Power System Stability Co-ordination

4.7.1 Stability analysis co-ordination

- (a) *NEMMCO* must, in cooperation with the relevant *Network Service Providers*, apply the *power system* stability guidelines described in clause 4.3.4(h) to the conduct of all necessary calculations associated with the stable operation of the *power system* and use its reasonable endeavours to coordinate the determination of the settings of equipment used to maintain *power system* stability. The *Network Service Providers* must submit to *NEMMCO* for approval the settings of any *transmission* equipment used to maintain the stable operation of the *power system*.
- (b) *NEMMCO* must arrange and endorse the installation of *power system* devices which are approved by *NEMMCO* to be necessary to assist the stable operation of the *power system*.

4.7.2 Audit and testing

NEMMCO must arrange, co-ordinate and supervise the conduct of such inspections and tests as it deems appropriate to assess the availability and adequacy of the devices installed to maintain *power system* stability.

4.8 Power System Security Operations

4.8.1 Registered Participants' advice

A *Registered Participant* must promptly advise *NEMMCO* or a relevant *System Operator* at the time that the *Registered Participant* becomes aware, of any circumstance which could be expected to adversely affect the secure operation of the *power system* or any equipment owned or under the control of the *Registered Participant* or a *Network Service Provider*.

4.8.2 Protection or control system abnormality

- (a) If a *Registered Participant* becomes aware that any relevant *protection system* or *control system* is defective or unavailable for service, that *Registered Participant* must advise *NEMMCO*. If *NEMMCO* considers it to be a threat to *power system security*, *NEMMCO* may direct that the equipment protected or operated by the relevant *protection system* or *control system* be taken out of operation or operated as *NEMMCO* directs.
- (b) A *Registered Participant* must comply with a direction given by *NEMMCO* under clause 4.8.2(a).

4.8.3 NEMMCO's advice on power system emergency conditions

- (a) *NEMMCO* must *publish* all relevant details promptly after *NEMMCO* becomes aware of any circumstance with respect to the *power system* which, in the reasonable opinion of *NEMMCO*, could be expected to materially adversely affect *supply* to or from *Registered Participants*.
- (b) Without limitation, such circumstances may include:
 - (1) electricity *supply* capacity shortfall, being a condition where there are insufficient *generation* or *supply* options available to securely *supply* the total load in a *region*;
 - (2) unexpected disruption of *power system security*, which may occur when:
 - (i) an unanticipated major *power system* or *generation plant contingency event* occurs; or
 - (ii) significant environmental or similar conditions, including weather, storms or fires, are likely to, or are affecting, the *power system*; or
 - (3) a *major supply disruption*.

4.8.4 Declaration of conditions

NEMMCO may declare the following conditions in relation to a period of time, either present or future:

- (a) *Low reserve* condition - when *NEMMCO* considers that the *short term capacity reserves* or *medium term capacity reserves* for the period being assessed have fallen below those determined by *NEMMCO* as being in accordance with the relevant *short term capacity reserve standards* or *medium term capacity reserve standards*;
- (b) *Lack of reserve* level 1 (LOR1) - when *NEMMCO* considers that there is insufficient *short term capacity reserves* available to provide complete replacement of the *contingency capacity reserve* on the occurrence of [any credible contingency event](#) ~~a critical single credible contingency event~~ for the period nominated;
- (c) *Lack of reserve* level 2 (LOR2) - when *NEMMCO* considers that the occurrence of [any credible contingency event](#) ~~a critical single credible contingency event~~ is likely to require *involuntary load shedding*;
- (d) *Lack of reserve* level 3 (LOR3) - when *NEMMCO* considers that *Customer load* (other than *ancillary services* or contracted *interruptible loads*) would be, or is actually being, interrupted automatically or manually in order to maintain or restore the security of the *power system*.

4.8.5 Managing declarations of conditions

- (a) *NEMMCO* must as soon as reasonably practicable *publish* any declaration under clause 4.8.4.
- (a1) The *publication* of any such declaration must, to the extent reasonably practicable, include the following:
 - (1) the nature and extent of the *low reserve* or *lack of reserve* condition; and
 - (2) the time period over which the *low reserve* or *lack of reserve* condition applies.
- (b) If *NEMMCO* makes a declaration under clause 4.8.4, *NEMMCO* must use its reasonable endeavours to follow the processes set out in clauses 4.8.5A and 4.8.5B.
- (c) Following a declaration under clause 4.8.4, *NEMMCO* must as soon as reasonably practicable *publish* notice of:
 - (1) any cancellation of that declaration; or
 - (2) any significant change in the *low reserve* or *lack of reserve* condition due to changed positions of *Scheduled Network Service Providers*, *Market Customers* and *Scheduled Generators* or due to other reasons.

4.8.5A Determination of the latest time for *NEMMCO* intervention

- (a) *NEMMCO* must immediately *publish* a notice of any foreseeable circumstances that may require *NEMMCO* to implement a *NEMMCO intervention event*.
- (b) A notice referred to in paragraph (a) must include the forecast circumstances creating the need for the *NEMMCO intervention event*.
- (c) *NEMMCO* must, as soon as reasonably practicable after the *publication* of a notice in accordance with paragraph (a), estimate and *publish* the latest time at which it would need to intervene through a *NEMMCO intervention event* should the response from the *market* not be such as to obviate the need for the *NEMMCO intervention event*.
- (d) In order to estimate the time referred to in paragraph (c), *NEMMCO* may request information from a *Scheduled Network Service Provider*, *Scheduled Generator* or *Market Customer* and may specify the time within which that information is to be provided.
- (e) The information that *NEMMCO* may request in accordance with paragraph (d) may include, but is not limited to:
 - (1) *plant* status;

- (2) any expected or planned *plant outages* and the MW capacity affected by the *outage*, proposed start date and time and expected end date and time associated with the *outage* and an indication of the possibility of deferring the *outage*; and
 - (3) estimates of the relevant costs to be incurred by the *Scheduled Network Service Provider*, *Scheduled Generator* or *Market Customer* should it be the subject of a *direction*, but only if *NEMMCO* considers it reasonably likely that such *Scheduled Network Service Provider*, *Scheduled Generator* or *Market Customer* will be subject to a *direction*.
- (f) A *Scheduled Network Service Provider*, *Scheduled Generator* or *Market Customer* must use reasonable endeavours:
- (1) to comply with a request for information under paragraph (d); and
 - (2) to provide *NEMMCO* with the information required in the time specified by *NEMMCO*.
- (g) *NEMMCO* must regularly review its estimate of the latest time at which it would need to intervene through a *NEMMCO intervention event*, and *publish* any revisions to the estimate.
- (h) *NEMMCO* must treat any information provided in response to a request under paragraph (d) as *confidential information* and use it for the sole purpose of assessing to which *Scheduled Network Service Provider*, *Market Customer* or *Scheduled Generator* it should issue *directions*.

4.8.5B Notifications of last time of NEMMCO intervention

If the latest practicable time for a *NEMMCO intervention event*, as estimated by *NEMMCO* under clause 4.8.5A, is reached and, taking into account *relevant NEMMCO intervention events*, the circumstances described under clause 4.8.5A(a) have not been alleviated, *NEMMCO* must to the extent reasonably practicable immediately:

- (1) *publish* a notice that *NEMMCO*:
 - (i) considers the time for the negotiation of further *reserve contracts* in accordance with rule 3.20 has elapsed; and
 - (ii) intends to implement a *NEMMCO intervention event*; and
- (2) amend the *pre-dispatch schedule* to ensure that it is a physically realisable schedule for all periods in which *NEMMCO* intends to implement a *NEMMCO intervention event*.

4.8.6 [Deleted]

4.8.7 Managing a power system contingency event

- (a) During the period when the *power system* is affected by a *contingency event* NEMMCO must carry out actions, in accordance with the guidelines set out in the *power system security and reliability standards* and its obligations concerning *sensitive loads*, to:
 - (1) identify the impact of the *contingency event* on *power system security* in terms of the capability of *generating units* or *transmission* or *distribution networks*; and
 - (2) identify and implement the actions required in each affected *region* to restore the *power system* to its *satisfactory operating state*.
- (b) When *contingency events* lead to potential or actual electricity *supply* shortfall events, NEMMCO must follow the procedures outlined in clause 4.8.9.

4.8.8 [Deleted]

4.8.9 Power to issue directions and clause 4.8.9 instructions

- (a) Notwithstanding any other provision of rule 4.8:
 - (1) NEMMCO may require a *Registered Participant* to do any act or thing if NEMMCO is satisfied that it is necessary to do so to maintain or re-establish the *power system* to a *secure operating state*, a *satisfactory operating state*, or a *reliable operating state*; and
 - (2) NEMMCO may authorise a person to do any of the things contemplated by section 116 of the *National Electricity Law* if NEMMCO is satisfied that it is necessary to do so for reasons of public safety or the security of the electricity system.
- (a1) If NEMMCO, or a person authorised by NEMMCO, requires a *Registered Participant* to:
 - (1) take action as contemplated by clause 4.8.9(a) or section 116 of the *National Electricity Law* in relation to *scheduled plant* or a *market generating unit*, NEMMCO is taken to have issued a *direction*; or
 - (2) take some other action contemplated by clause 4.8.9(a) or section 116 of the *National Electricity Law*, NEMMCO is taken to have issued a *clause 4.8.9 instruction*.
- (a2) NEMMCO must use reasonable endeavours to ensure that persons authorised by NEMMCO under clause 4.8.9(a)(2) follow all relevant processes in clause 4.8 prior to issuing a *direction*, unless it is not reasonably practical to do so.

-
- (b) *NEMMCO* must develop, and may amend from time to time, in accordance with the *Rules consultation procedures*, procedures for the issuance of *directions*. Such procedures must reflect the following principles:
- (1) *NEMMCO* must use its reasonable endeavours to minimise any cost related to *directions* and compensation to *Affected Participants* and *Market Customers* pursuant to clause 3.12.2 and compensation to *Directed Participants* pursuant to clauses 3.15.7 and 3.15.7A;
 - (2) a *direction* should be revoked as soon as *NEMMCO* determines that the *direction* is no longer required;
 - (3) *NEMMCO* must take into account any applicable guidelines issued by the *Reliability Panel*;
 - (4) *NEMMCO* must observe its obligations under clause 4.3.2 concerning *sensitive loads*;
 - (5) *NEMMCO* must expressly notify a *Directed Participant* that *NEMMCO's* requirement or that of another person authorised by *NEMMCO* pursuant to clause 4.8.9(a) is a *direction*.
- (c) A *Registered Participant* must use its reasonable endeavours to comply with a *direction* or *clause 4.8.9 instruction* unless to do so would, in the *Registered Participant's* reasonable opinion, be a hazard to public safety, or materially risk damaging equipment, or contravene any other law.
- (c1) Subject to clause 4.8.9(c) a *Registered Participant* must use its best endeavours to comply with a *direction* or *clause 4.8.9 instruction* in accordance with the timeframe specified by *NEMMCO* in the *direction* or *clause 4.8.9 instruction*.
- (c2) A *Market Participant* must not by any act or omission, whether intentionally or recklessly, cause or significantly contribute to the circumstances causing a *direction* to be issued, without reasonable cause.
- (d) A *Registered Participant* must immediately notify *NEMMCO* of its inability to comply or its intention not to comply with a *direction* or *clause 4.8.9 instruction*.
- (e) If a *Registered Participant* does not comply with a *direction* or *clause 4.8.9 instruction*, it must within 2 *business days* of the *direction* or *clause 4.8.9 instruction* deliver to *NEMMCO* and the *AER* a report detailing the reasons for the non compliance together with all relevant facts.
- (f) *NEMMCO* must *publish* a report in accordance with clause 3.13.6A.
- (g) Any *Registered Participant* who is aware of a failure to comply with a *direction* or *clause 4.8.9 instruction* or who believes any such failure has

taken place must notify *NEMMCO* and the *AER* in writing and as soon as practicable of that fact.

- (h) If *NEMMCO* issues a *direction* or *clause 4.8.9 instruction*, *NEMMCO* may, to give effect to the *direction* or *clause 4.8.9 instruction*:
 - (1) submit, update or vary *dispatch bids*, *dispatch offers* or *rebids* in relation to the *plant* of *Directed Participants* and *Affected Participants*;
 - (2) change other inputs to the *dispatch process*; or
 - (3) select a *Market Participant* or *Market Participants* to become *Affected Participants* to implement clause 3.8.1(b)(11).
- (i) When issuing *clause 4.8.9 instructions* to implement *load shedding* across *interconnected regions*, *NEMMCO* must use reasonable endeavours to implement *load shedding* in an equitable manner as specified in the *power system security and reliability standards*, taking into account the *power transfer capability* of the relevant *networks*.
- (j) When issuing *clause 4.8.9 instructions* to implement *load shedding*, *NEMMCO* must comply with its obligations under clauses 4.3.2(e) to (l) and Part 8 of the *National Electricity Law*.

4.8.9A System security directions

- (a) Notwithstanding any other provision of the *Rules*, a *Registered Participant* must follow any *direction* issued by or on behalf of *NEMMCO* and with which that *Registered Participant* is required to comply under Chapter 4 or section 116 of the *National Electricity Law*.
- (b) Any event or action required to be performed pursuant to a *direction* issued under Chapter 4 or section 116 of the *National Electricity Law* on or by a stipulated *day* is required by the *Rules* to occur on or by that *day*, whether or not a *business day*.
- (c) Any failure to observe such a *direction* will be deemed to be a breach of the *Rules*.
- (d) *NEMMCO* or any *Registered Participant* who is aware of any such failure must notify the *AER* in writing of the failure.

4.8.10 Disconnection of generating units and market network services

- (a) Where, under the *Rules*, *NEMMCO* has the authority or responsibility to *disconnect* a *generating unit* or a *market network service*, then it may do so (either directly or through any agent) as described in rule 5.9.

- (b) The relevant *Generator* or *Market Network Service Provider* must provide all reasonable assistance to *NEMMCO* for the purpose of such *disconnection*.

4.8.11 [Deleted]

4.8.12 System restart plan and local black system procedures

- (a) *NEMMCO* must prepare, and may amend, a *system restart plan* for the purpose of managing and coordinating system restoration activities during any *major supply disruption*.
- (b) The *system restart plan* is *confidential information*.
- (c) The *system restart plan* must be consistent with the *system restart standard*.
- (d) Each *Generator* and *Network Service Provider* must develop *local black system procedures* in accordance with the guidelines referred to in clause 4.8.12(e). A *Generator's* or *Network Service Provider's local black system procedures* must be consistent with any *ancillary services agreement* to provide *system restart ancillary services* to which that *Generator* or *Network Service Provider* is a party. On request from *NEMMCO*, or as a result of a significant change of circumstances, a *Generator* or *Network Service Provider* must review, and amend if appropriate, its *local black system procedures*.
- (e) Subject to clause 4.8.12(f), *NEMMCO* must develop and *publish*, and may amend, guidelines for the preparation of *local black system procedures* in consultation with *Generators* and *Network Service Providers*.
- (f) *Local black system procedures* must:
 - (1) provide sufficient information to enable *NEMMCO* to understand the likely condition and capabilities of *plant* following any *major supply disruption* such that *NEMMCO* is able to effectively co-ordinate the safe implementation of the *system restart plan*; and
 - (2) appropriately incorporate any relevant *energy support arrangements* to which a *Generator* or *Network Service Provider* may be party.
- (g) Each *Generator* and *Network Service Provider* must submit its *local black system procedures*, including any amendments to those procedures, to *NEMMCO* for approval. In considering whether to grant approval, *NEMMCO* must take into account the consistency of the *local black system procedures* with:
 - (1) the guidelines referred to in clause 4.8.12(e); and
 - (2) relevant components of the *system restart plan*.

- (h) *NEMMCO* may request amendments to *local black system procedures*, including, without limitation, imposing conditions in respect of any *energy support arrangement* as *NEMMCO* reasonably considers necessary to ensure the integrity of the *system restart plan*. When requesting amendments to the *local black system procedures*, *NEMMCO* must provide reasons for those requested amendments.
- (i) Requests by *NEMMCO* for amendments under clause 4.8.12(h) must be by notice in writing to a *Generator* or *Network Service Provider*. Reasonable requests by *NEMMCO* for amendments under clause 4.8.12(h) must be complied with by a *Generator* or *Network Service Provider*.
- (j) *NEMMCO* and *Network Service Providers* must jointly develop communication protocols to facilitate the exchange of all information relevant to the roles played by *NEMMCO*, *Network Service Providers*, *Generators* and *Customers* in the implementation of the *system restart plan*.

4.8.13 [Deleted]

4.8.14 Power system restoration

- (a) *NEMMCO* must notify a *Registered Participant* if, in *NEMMCO*'s reasonable opinion, there is a *major supply disruption* which is affecting, or which may affect, that *Registered Participant*.
- (b) If *NEMMCO* advises a *Generator* or *Network Service Provider* of a *major supply disruption*, or if the terms of the relevant *local black system procedures* require the *Generator* or *Network Service Provider* to take action, then the *Generator* or *Network Service Provider* must comply with the requirements of the *local black system procedures* as quickly as is practicable.
- (c) Where in *NEMMCO*'s reasonable opinion the *system restart plan* cannot be implemented to effectively ameliorate the actual *power system* conditions created by a *major supply disruption*, *NEMMCO* may adapt or vary the *system restart plan* as it considers reasonably necessary to suit those actual *power system* conditions.
- (d) If there is a *major supply disruption*, a *Generator* or *Network Service Provider* must comply with *NEMMCO*'s *directions* or *clause 4.8.9 instructions* regarding the restoration of the *power system*.
- (e) If there is a *major supply disruption*, a *Market Customer* must comply with *NEMMCO*'s *directions* with respect to the timing and magnitude of *load* restoration.

4.8.15 Review of operating incidents

- (a) For the purposes of this clause 4.8.15:

Reviewable operating incident means:

- (1) an incident comprising:
 - (i) a *non-credible contingency event* or multiple *contingency events* on the *transmission system*; or
 - (ii) a *black system* condition; or
 - (iii) an event where the *frequency* of the *power system* is outside limits specified in the *power system security and reliability standards*; or
 - (iv) an event where the *power system* is not in a *secure operating state* for more than 30 minutes; or
 - (v) an event where *NEMMCO* issues a *clause 4.8.9 instruction* for *load shedding*,
being an incident identified, in accordance with guidelines determined by the *Reliability Panel* under rule 8.8, to be of significance to the operation of the *power system* or a significant deviation from normal operating conditions; or
- (2) an incident where *NEMMCO* has been responsible for the *disconnection of facilities* of a *Registered Participant* under the circumstances described in clause 5.9.5; or
- (3) any other operating incident identified, in accordance with guidelines determined by the *Reliability Panel* under rule 8.8, to be of significance to the operation of the *power system* or a significant deviation from normal operating conditions;

but does not include an incident in respect of which *NEMMCO* is required to conduct a review under clause 3.14.3(c).

- (b) *NEMMCO* must conduct a review of every reviewable operating incident 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*.
- (c) *NEMMCO* must prepare a report on the review of a reviewable operating incident, and where that report relates to an incident described in clause 4.8.15(a)(1) or (3), *NEMMCO* must make the report available to *Registered Participants* and to the public.

(ca) With respect to a report that has been prepared by *NEMMCO* in accordance with clause 4.8.15(a)(1) or (3) that relates to an operating incident involving a *non-credible contingency event*, the report must include details of how the re-classification criteria identified under clause 4.2.3B that are applicable to that *contingency event* were assessed and applied in the context of that event.

- (d) Where *NEMMCO* has been responsible for the *disconnection* of facilities of a *Registered Participant* under the circumstances described in clause 5.9.5, *NEMMCO* must provide a report on that review to the *Registered Participant*, the *AEMC* and the *AER* advising of the circumstances requiring that action.
- (e) A *Registered Participant* must co-operate in any review conducted by *NEMMCO* including making available relevant records and information.
- (f) *NEMMCO* may request a *Registered Participant* to provide such information relating to the performance of equipment of that *Registered Participant* during and after reviewable operating incidents, as *NEMMCO* reasonably requires for the purposes of analysing or reporting on the incident.
- (g) A *Registered Participant* must provide the information requested by *NEMMCO* under clause 4.8.15(f) within 20 *business days* unless *NEMMCO* agrees to a longer period, taking into account:
 - (1) the particular circumstances of the reviewable operating incident; and
 - (2) any request made under clause 4.8.15(h).
- (h) *NEMMCO* must as soon as practicable, provide to a *Registered Participant* such information relating to the performance of equipment of the *Registered Participant* during and after a reviewable operating incident as the *Registered Participant* reasonably requests and in relation to which *NEMMCO* is required to conduct a review under this clause 4.8.15.
- (i) At any time when no guidelines are in force under rule 8.8, *NEMMCO* may conduct a review of any incident referred to in clause 4.8.15(a)(1) that *NEMMCO* considers to be of significance to the operation of the *power system* or a significant deviation from normal operating conditions, and this clause 4.8.15 applies to and in respect of the review as if the incident were a reviewable operating incident.

4.9 Power System Security Related Market Operations

4.9.1 Load forecasting

- (a) *NEMMCO* must produce (at the intervals indicated and in accordance with the *timetable*) an indicative *load* forecast for each *region* for the periods indicated below:
 - (1) each *day*, a forecast for the *day* ahead, such forecast divided into half-hourly *load* forecasts for each *trading interval*;
 - (2) each *day*, a forecast for 2 to 7 *days* (inclusive) ahead, the forecasts for each *day* divided into half-hourly *load* forecasts for each *trading interval*;

- (3) every week, a forecast for the *24 months* ahead of the *day* on which the forecast is produced, with a daily profile based on an estimated weekly peak load condition with allowances for weekends and holidays.
- (b) These forecasts must provide an indicative estimate of the total *generation* capacity required to meet the forecast *load* (called “forecast load (as generated)”), and an equivalent estimation of the *supply* required to be delivered to the relevant *transmission network* (called “forecast load (sent out)”).
- (c) The following factors must be taken into account in the development of the *load* forecasts, to the extent that such are relevant to the particular forecast:
 - (1) the annual *load* forecasts and *load* profiles collected by the *Network Service Providers* from all *Registered Participants* as required by schedule 5.7, including *load* management expectations and expected *sent out generation* from *embedded generating units*;
 - (2) historic *load* data, including *transmission* losses and *power station* in-house use of the *generated* output;
 - (3) weather forecasts and the current and historic weather conditions and pattern;
 - (4) the incidence of major events or activities which are known to *NEMMCO*;
 - (5) anticipated pumped storage *loads*;
 - (6) official economic activity forecasts from *participating jurisdictions*; and
 - (7) other information provided by *Registered Participants*.
- (d) *NEMMCO* must develop a methodology to create the indicative *load* forecasts.
- (e) A 10% probability of exceedence of *load* forecast must be adopted for the purposes of determination of *short term capacity reserve* and *medium term capacity reserve* requirements under the *power system security and reliability standards*.
- (f) *NEMMCO* must aggregate the regional forecasts to produce a total *interconnected transmission network* indicative *load* schedule for use in *NEMMCO* processes such as the determination of the required levels of *short term capacity reserves*, *medium term capacity reserves*, the *PASA* assessments and *pre-dispatch schedules*.
- (g) The *load* forecasts produced by *NEMMCO* are indicative only as *NEMMCO* has no direct influence over *Market Participants* in their

decisions about their level of demand and, accordingly, no person may claim any loss or damage from *NEMMCO* as a result of any difference between *load* forecasts and actual *load*.

4.9.2 Dispatch instructions to Scheduled Generators

- (a) To implement *central dispatch* or, where *NEMMCO* has the power to direct or to instruct a *Scheduled Generator* either under Chapter 3 or this Chapter, then for the purpose of giving effect to that direction or instruction, *NEMMCO* may at any time give an instruction to a *Scheduled Generator* in relation to any of its *scheduled generating units* (a *dispatch instruction*), in accordance with clause 4.9.5(b), nominating:
 - (1) whether the facilities for *generation* remote control by *NEMMCO*, if available, are required to be in service; and
 - (2) the level or schedule of power to be supplied by the *generating unit* over the specified period.
- (b) Subject to paragraph (c), *NEMMCO* may at any time give an instruction to a *Generator* in relation to any of its *generating units* with a *nameplate rating* of 30MW or more, or its *generating systems* of combined *nameplate rating* of 30 MW or more, nominating that:
 - (1) the *generating unit* or *generating system* transformer is to be set to a nominated tap position (if it has on-load tap changing capability);
 - (2) the *generating unit's* or *generating system's voltage control system* set-point is to be set to give a nominated *voltage*; or
 - (3) the *generating unit* or *generating system* is to be operated to supply or absorb a nominated level of *reactive power* at its *connection point*.
- (c) Unless otherwise provided under an *ancillary services agreement* or a *connection agreement*, *NEMMCO* must not give an instruction under paragraph (b) that requires a *generating unit* or *generating system* to supply or absorb *reactive power* at a level outside the *plant's relevant performance standard*.
- (d) A *Scheduled Generator* must with respect to *scheduled generating units* which have an availability offer of greater than 0 MW (whether *synchronised* or not), ensure that appropriate personnel are available at all times to receive and immediately act upon *dispatch instructions* issued to the *Scheduled Generator* by *NEMMCO*.

4.9.2A Dispatch Instructions to Scheduled Network Service Providers

- (a) Where *NEMMCO* has the power to direct or to instruct a *Scheduled Network Service Provider* either under Chapter 3 or this Chapter then, for the purpose of giving effect to that direction or instruction, *NEMMCO* may

at any time give an instruction to a *Scheduled Network Service Provider* in relation to any of its *scheduled network services* (a “*dispatch instruction*”), in accordance with clause 4.9.5(b), nominating:

- (1) whether the facilities for remote control by *NEMMCO*, if available, are required to be in service; and
 - (2) the level or schedule of power to be transferred by the *network service* over the specified service.
- (b) **[Deleted]**
- (c) A *Scheduled Network Service Provider* must, with respect to *scheduled network services* which have an availability offer of greater than 0 MW, ensure that appropriate personnel are available at all times to receive and immediately act upon *dispatch instructions* issued to the *Scheduled Network Service Provider* by *NEMMCO*.

4.9.3 Instructions to Registered Participants

- (a) *NEMMCO* may, at any time, give instructions to *Registered Participants* to reduce their *load* for electricity consistent with *dispatch bids* made in accordance with Chapter 3 (“*dispatch instructions*”).
- (b) **[Deleted]**
- (c) **[Deleted]**
- (d) A *Market Customer* must, with respect to *scheduled loads* in relation to which a *dispatch offer* has been submitted for a particular *trading interval*, ensure that appropriate personnel and/or electronic facilities are available at all times to receive and immediately act upon *dispatch instructions* issued to the *Market Customer* by *NEMMCO*.

4.9.3A Ancillary services instructions

- (a) *NEMMCO* may at any time give an instruction (a “*dispatch instruction*”) to a *Market Participant* which has classified one or more of its *generating units* or *market loads* as an *ancillary service generating unit* or an *ancillary service load*:
 - (1) stating that the relevant *generating unit* or *load* has been selected for the provision of a *market ancillary service*;
 - (2) stating the *market ancillary service* concerned; and
 - (3) nominating the range to be *enabled*.
- (b) *NEMMCO* may at any time give an instruction (a “*dispatch instruction*”) to a *Registered Participant* with which *NEMMCO* has an *ancillary services*

agreement in relation to the provision of *non-market ancillary services* under that *ancillary services agreement* or which *NEMMCO* is otherwise entitled to give under that *ancillary services agreement*.

- (c) A *Market Participant* which has:
- (1) classified one or more of its *generating units* or *market loads* as an *ancillary service generating unit* or an *ancillary service load*; and
 - (2) submitted a *market ancillary service offer* in respect of that *generating unit* or *load*,

must ensure that appropriate personnel or electronic facilities are available at all times to receive and immediately act upon *dispatch instructions* issued to the *Market Participant* by *NEMMCO*.

- (d) A *Registered Participant* with which *NEMMCO* has an *ancillary services agreement* must ensure that appropriate personnel or electronic facilities are available in accordance with that agreement at all times to receive and immediately act upon *dispatch instructions* issued to the *Registered Participant* by *NEMMCO*.

4.9.3B Compliance with dispatch instructions

- (a) A *dispatch instruction* applies from the time it is given (or any later time specified in the *dispatch instruction*) until the earlier of:
- (1) the cessation time specified in the *dispatch instruction* (if any); or
 - (2) the time when the next *dispatch instruction* applies.

4.9.4 Dispatch related limitations on Scheduled Generators

A *Scheduled Generator* must not, unless in the *Scheduled Generator's* reasonable opinion public safety would otherwise be threatened or there would be a material risk of damaging equipment or the environment:

- (a) send out any *energy* from a *scheduled generating unit*, except:
- (1) in accordance with the *self-commitment* procedures specified in clause 4.9.6 up to the *self-dispatch level*;
 - (2) in accordance with a *dispatch instruction*;
 - (3) as a consequence of operation of the *generating unit's* automatic *frequency response mode* to *power system* conditions;
 - (4) in response to remote control signals given by *NEMMCO* or its agent;
or

- (5) in connection with a test conducted in accordance with the requirements of this Chapter or Chapter 5;
- (b) adjust the *transformer tap position* or *excitation control system voltage* set-point of a *scheduled generating unit* except:
 - (1) in accordance with a *dispatch instruction*;
 - (2) in response to remote control signals given by *NEMMCO* or its agent;
 - (3) if, in the *Scheduled Generator's* reasonable opinion, the adjustment is urgently required to prevent material damage to the *Scheduled Generator's plant* or associated equipment, or in the interests of safety; or
 - (4) in connection with a test conducted in accordance with the requirements of rule 5.7;
- (c) *energise* a *connection point* in relation to a *scheduled generating unit* without prior approval from *NEMMCO*. This approval must be obtained immediately prior to *energisation*;
- (d) *synchronise* a *scheduled generating unit* to, or *de-synchronise* a *scheduled generating unit* from, the *power system* without prior approval from *NEMMCO* or other than in response to a *dispatch instruction* except *de-synchronisation* as a consequence of the operation of automatic protection equipment or where such action is urgently required to prevent material damage to *plant* or equipment or in the interests of safety;
- (e) change the *frequency response mode* of a *scheduled generating unit* without the prior approval of *NEMMCO*; or
- (f) remove from service or interfere with the operation of any *power system* stabilising equipment installed on that *generating unit*.

4.9.4A Dispatch related limitations on Scheduled Network Service Providers

A *Scheduled Network Service Provider* must not, unless in the *Scheduled Network Service Provider's* reasonable opinion public safety would otherwise be threatened or there would be a material risk of damaging equipment or the environment:

- (a) *energise* a *connection point* in relation to a *scheduled network service* without prior approval from *NEMMCO*. This approval must be obtained immediately prior to *energisation*; or
- (b) *synchronise* a *scheduled network service* to, or *de-synchronise* a *scheduled network service* from, the *power system* without prior approval from *NEMMCO* except *de-synchronisation* as a consequence of the operation of

automatic protection equipment or where such action is urgently required to prevent material damage to *plant* or equipment or in the interests of safety.

4.9.5 Form of dispatch instructions

- (a) A *dispatch instruction* for a *scheduled generating unit*, a *dispatch instruction* for a *scheduled network service* and a *dispatch instruction* for a *scheduled load* (including aggregated *generating units*, *scheduled network services* or *scheduled loads* as described in clause 3.8.3) must include the following:
- (1) specific reference to the *scheduled generating unit* (including any aggregated *generating unit*), *scheduled network service* or *scheduled load* or other *facility* to which the *dispatch instruction* applies;
 - (2) the desired outcome of the *dispatch instruction* such as *active power*, *reactive power*, *transformer tap* or other outcome;
 - (3) in the case of a *dispatch instruction* under clause 4.9.2, the *ramp rate* (if applicable) which is to be followed by the *generating unit* or a specific target time to reach the outcome specified in the *dispatch instruction*;
 - (4) the time the *dispatch instruction* is issued; and
 - (5) if the time at which the *dispatch instruction* is to take effect is different from the time the *dispatch instruction* is issued, the start time.
- (a1) A *dispatch instruction* for an *ancillary service* must include:
- (1) specific reference to the *generating unit* or *load* to which the *dispatch instruction* applies;
 - (2) the desired outcome of the *dispatch instruction*;
 - (3) the time the *dispatch instruction* is issued; and
 - (4) if the time at which the *dispatch instruction* is to take effect is different from the time the *dispatch instruction* is issued, the start time.
- (b) The *dispatch instruction* must be provided as provided in clause 3.8.21.

4.9.6 Commitment of scheduled generating units

- (a) Self-commitment:
- (1) In relation to any *scheduled generating unit*, the *Scheduled Generator* must confirm with *NEMMCO* the expected *synchronising time* at least one hour before the expected actual *synchronising time*, and

update this advice 5 minutes before *synchronising* unless otherwise agreed with *NEMMCO*. *NEMMCO* may require further notification immediately before *synchronisation*.

- (2) The *Scheduled Generator* must advise *NEMMCO* when a *generating unit* reaches the *self-dispatch level* (being a *self-dispatch level* that is greater than zero MW) and must not increase output above that level unless instructed otherwise by *NEMMCO* to increase output or unless the increase in output results from the *generating unit* being placed under remote control to be loaded in accordance with Chapter 3.
- (b) Instructions by *NEMMCO* to commit a *generating unit* for service:
- (1) A *dispatch instruction* for a *scheduled generating unit* to commit given by *NEMMCO* in response to a *dispatch offer* must be consistent with the start-up time specified in the latest *dispatch offer* in relation to the *generating unit*.
 - (2) When *NEMMCO* issues a *dispatch instruction* to a *generating unit* for *commitment*, *NEMMCO* must nominate the time at which the *generating unit* is to be *synchronised*.
 - (3) After a *dispatch instruction* for *commitment* of a *generating unit* has been issued, the relevant *Scheduled Generator* must promptly advise *NEMMCO* of any inability to meet the nominated time to *synchronise*.
 - (4) Unless instructed otherwise by *NEMMCO*, at the time a *dispatch instruction* to *commit* takes effect, the relevant *generating unit* must remain on *self-dispatch level* until *NEMMCO* issues a further *dispatch instruction*.

4.9.7 De-commitment, or output reduction, by Scheduled Generators

- (a) In relation to any *scheduled generating unit*, the *Scheduled Generator* must confirm with *NEMMCO* the expected *de-synchronising* time at least one hour before the expected actual *de-synchronising* time, and update this advice 5 minutes before *de-synchronising* unless otherwise agreed with *NEMMCO*. *NEMMCO* may require further notification immediately before *de-synchronisation*.
- (b) The *Scheduled Generator* must not de-commit a *generating unit* unless it has confirmed with *NEMMCO*:
 - (1) the time to commence decreasing the output of the *generating unit*;
 - (2) the *ramp rate* to decrease the output of the *generating unit*;
 - (3) the time to *de-synchronise* the *generating unit*; and
 - (4) the output from which the *generating unit* is to be *de-synchronised*.

4.9.8 General responsibilities of Registered Participants

- (a) A *Registered Participant* must comply with a *dispatch instruction* given to it by *NEMMCO* unless to do so would, in the *Registered Participant's* reasonable opinion, be a hazard to public safety or materially risk damaging equipment.
- (b) A *Scheduled Generator* must ensure that each of its *scheduled generating units* is at all times able to comply with the latest *generation dispatch offer* under Chapter 3 in respect of that *generating unit*.
- (b1) A *Scheduled Network Service Provider* must ensure that each of its *scheduled network services* is at all times able to comply with the latest *network dispatch offer* under Chapter 3 in respect of that *market network service*.
- (c) A *Registered Participant* must ensure that each of its *facilities* is at all times able to comply with any relevant *dispatch bid* under Chapter 3 in respect of the *facility* (as adjusted by any subsequent restatement of that bid under Chapter 3).
- (d) A *Market Participant* which has classified a *generating unit* or *load* as an *ancillary service generating unit* or an *ancillary service load*, as the case may be, must ensure that the *ancillary service generating unit* or *ancillary service load* is at all times able to comply with the latest *market ancillary service offer* for the relevant *trading interval*.

4.9.9 Scheduled Generator plant changes

A *Scheduled Generator* must, without delay, notify *NEMMCO* of any event which has changed or is likely to change the operational availability of any of its *scheduled generating units*, whether the relevant *generating unit* is *synchronised* or not, as soon as the *Scheduled Generator* becomes aware of the event.

4.9.9A Scheduled Network Service Provider plant changes

A *Scheduled Network Service Provider* must, without delay, notify *NEMMCO* of any event which has changed or is likely to change the operational availability of any of its *scheduled network services* as soon as the *Scheduled Network Service Provider* becomes aware of the event.

4.9.9B Ancillary service plant changes

A *Market Participant* which has classified a *generating unit* or *load* as an *ancillary service generating unit* or an *ancillary service load* must, without delay, notify *NEMMCO* of any event which has changed or is likely to change the availability of a *market ancillary service*, or the capability of the *generating unit* or *load* to respond in the manner contemplated by the *market ancillary service specification*, as soon as the *Market Participant* becomes aware of the event.

4.10 Power System Operating Procedures

4.10.1 Power system operating procedures

- (a) The *power system operating procedures* are:
- (1) any instructions which may be issued by *NEMMCO* from time to time covering *market operations* and relating to the operation of the *power system*;
 - (2) any guidelines issued from time to time by *NEMMCO* in relation to *power system security*;
 - (3) regional specific *power system operating procedures* covering the operational activities and associated responsibilities of the relevant *Network Service Provider* and any *Registered Participants* connected to the relevant *transmission network* and operational activities for operational elements of the *transmission network* which interface with *Scheduled Generators* and other *Registered Participants* including, but not limited to, those relating to *sensitive loads*;
 - (4) the *load shedding procedures*; and
 - (5) any other procedures, instructions or guidelines which *NEMMCO* nominates to be and advises to *Registered Participants* as being *power system operating procedures* from time to time.
- (b) *NEMMCO* must compile the *regional specific power system operating procedures* in conjunction with the relevant *Network Service Providers* and the relevant *Jurisdictional System Security Coordinators* to the extent required under clause 4.10.1(a)(3).
- (c) *NEMMCO* must ensure that the various elements of the *power system operating procedures* are consistent with the *load shedding procedures*.

4.10.2 Transmission network operations

- (a) *NEMMCO* must exercise any power granted to it by the *Rules* or the *power system operating procedures* to:
- (1) approve the manner in which operations are carried out on a *transmission network* by the relevant *Network Service Provider*; or
 - (2) instruct the relevant *Network Service Provider* to take any action on the *transmission network*,
- in accordance with the appropriate *power system operating procedures*.
- (b) A *Registered Participant* must observe the requirements of the relevant *power system operating procedures*.
- (c) *Registered Participants* must operate their equipment interfacing with a *transmission network* in accordance with the requirements of Chapter 5,

any applicable *connection agreement, ancillary services agreement, and the associated power system operating procedures.*

- (d) *Registered Participants* must ensure that *transmission network* operations performed on their behalf are undertaken by authorised persons advised in writing to *NEMMCO*.
- (e) *NEMMCO* must ensure the regular review and update of the *regional specific power system operating procedures.*

4.10.3 Operating interaction with distribution networks

- (a) *NEMMCO* and each *Distribution System Operator* must maintain effective communications concerning the conditions of its *distribution network* and the *transmission network* or other *distribution network* to which that *distribution network* is *connected* and to co-ordinate activities where operations are anticipated to affect other *transmission* or *distribution networks.*
- (b) *NEMMCO* must use its reasonable endeavours to give at least 3 *days'* notice to all affected *Distribution System Operators* prior to a *Transmission Network Service Provider* carrying out switching related to a *transmission network* which could reasonably be expected to affect security of *supply* to any *distribution network.*

4.10.4 Switching of a Distributor's high voltage networks

- (a) A *Distribution System Operator* must use reasonable endeavours to give *NEMMCO* at least 3 *days'* prior notice of plans to carry out switching related to the *high voltage* network which could reasonably be expected to materially affect power flows at points of *connection* to a *transmission network.* The *Distribution System Operator* must also notify *NEMMCO* immediately prior to carrying out any such switching.
- (b) A *Distribution System Operator* must provide confirmation to *NEMMCO* of any such switching immediately after it has occurred.

4.10.5 Switching of reactive power facilities

- (a) *NEMMCO* may instruct a *Distribution System Operator* to place *reactive power facilities* belonging to or controlled by that *Distribution System Operator* into or out of service for the purposes of maintaining *power system security* where prior arrangements concerning these matters have been made between *NEMMCO* and the *Distribution System Operator.*
- (b) Without limitation to its obligations under such prior arrangements, a *Distribution System Operator* must use reasonable endeavours to comply with such an instruction given by *NEMMCO* or its authorised agent.

4.10.6 Automatic reclose

- (a) A *Network Service Provider* or a *Distribution System Operator* may request *NEMMCO* to disable or enable *automatic reclose equipment* in relation to a particular *transmission* or *distribution network* circuit or a feeder connecting its *distribution network* to a *transmission network* which has *automatic reclose equipment* installed on it.
- (b) If a *Distribution System Operator* makes such a request, then *NEMMCO* must use reasonable endeavours to comply with the request as soon as reasonably practical.
- (c) *NEMMCO* is not responsible for the consequences of automatic reclosure in relation to a circuit or a feeder and the *Distribution System Operator* must indemnify *NEMMCO* against any loss or damage arising out of *NEMMCO* complying with such a request unless the loss or damage is due to the failure by *NEMMCO* to comply with the request within a reasonable period of time.

4.10.7 Inspection of facilities by NEMMCO

NEMMCO may inspect a *facility* of a *Registered Participant* as specified in clause 5.7.1.

4.11 Power System Security Support

4.11.1 Remote control and monitoring devices

- (a) All remote control, operational *metering* and monitoring devices and local circuits as described in schedules 5.2, 5.3 and 5.3a, must be installed and maintained in accordance with the standards and protocols determined and advised by *NEMMCO* (for use in the *control centres*) for each:
 - (1) *scheduled generating unit connected* to the *transmission* or *distribution network*; and
 - (2) *substation* connected to the *network*.
- (b) The provider of any *ancillary services* must arrange the installation and maintenance of all *remote control equipment* and *remote monitoring equipment* in accordance with the standards and protocols determined and advised by *NEMMCO* for use in the relevant *control centre*.
- (c) The control and monitoring devices must include provision for indication of *active power* and *reactive power* output, provision for signalling the status and any associated alarm condition relevant to achieving adequate control of the *transmission network*, and provision for indication of *generating plant* active and reactive output.

- (d) Where reasonably necessary to allow *NEMMCO* to discharge its *market and power system security* functions *NEMMCO* may, by notice in writing, require a *Network Service Provider*, a *Generator* or a *Market Network Service Provider* to:
 - (1) install *remote monitoring equipment* which, in *NEMMCO's* reasonable opinion, is adequate to enable *NEMMCO* to remotely monitor the performance of a *transmission system* or *distribution system, generating unit* (including its *dynamic performance*) or a *market network service facility* as appropriate; and
 - (2) upgrade, modify or replace any *remote monitoring equipment* already installed in a *facility* provided that the existing *remote monitoring equipment* is, in the reasonable opinion of *NEMMCO*, no longer fit for the intended purpose.
- (e) A *Network Service Provider, Generator* or *Market Network Service Provider* who receives a notice in accordance with clause 4.11.1(d), must comply with the notice within 120 *business days* or such further period that *NEMMCO* requires.
- (f) **[Deleted]**
- (g) A *Generator* or *Market Network Service Provider* wishing to receive *dispatch instructions* electronically from *NEMMCO's* *automatic generation control system* under clause 3.8.21(d) must comply with *NEMMCO's* reasonable requirements in respect of how the remote control signals are issued by the *automatic generation control system* and transmitted to the *facility*.

4.11.2 Operational control and indication communication facilities

- (a) Each *Network Service Provider* must provide and maintain, in accordance with the standards referred to in clause 4.11.2(c), the necessary primary and, where nominated by *NEMMCO*, back-up communications facilities for control, operational *metering* and indication from the relevant local sites to the appropriate interfacing termination as nominated by *NEMMCO*.
- (b) *NEMMCO* must provide and maintain the communication facilities between control centres of each *Transmission Network Service Provider*, on the one hand, and the *NEMMCO co-ordinating centre*, on the other hand.
- (c) *NEMMCO* must develop, and may amend, standards in consultation with *Network Service Providers* in accordance with the *Rules consultation procedures* which must be met by *Network Service Providers* in providing and maintaining the facilities referred to in clause 4.11.2(a).
- (d) Until the standards contemplated by clause 4.11.2(c) are issued by *NEMMCO*, each *Network Service Provider* must maintain the primary and back-up communications facilities referred to in clause 4.11.2(a) that were

in place at 13 December 1998 so as to achieve substantially the same performance and functionality as they did over the 12 months prior to 13 December 1998.

4.11.3 Power system voice/data operational communication facilities

- (a) *Network Service Providers, System Operators, Distribution System Operators, Generators and Market Participants* must advise *NEMMCO* of each nominated person for the purposes of giving or receiving *operational communications* in relation to each of its *facilities*. The persons so nominated must be those responsible for undertaking the operation of the relevant equipment of the relevant *Registered Participant*.
- (b) Contact personnel details which must be forwarded to *NEMMCO* include:
 - (1) title of contact personnel;
 - (2) the telephone numbers of those personnel;
 - (3) the telephone numbers of other available communication systems in relation to the relevant *facility*;
 - (4) a facsimile number for the relevant *facility*; and
 - (5) an electronic mail address for the relevant *facility*.
- (c) Each *Registered Participant* must provide, for each nominated person, two independent telephone communication systems fully compatible with the equipment installed at the appropriate *control centre* nominated by *NEMMCO*.
- (d) Each *Registered Participant* must maintain both telephone communication systems in good repair and must investigate faults within 4 hours, or as otherwise agreed with *NEMMCO*, of a fault being identified and must repair or procure the repair of faults promptly.
- (e) Each *Registered Participant* must establish and maintain a form of electronic mail facility as approved by *NEMMCO* for communication purposes (such approval may not be unreasonably withheld).
- (f) *NEMMCO* must advise all *Registered Participants* of nominated persons for the purposes of giving or receiving *operational communications*.
- (g) Contact personnel details to be provided by *NEMMCO* include title, telephone numbers, a facsimile number and an electronic mail address for the contact person.

4.11.4 Records of power system operational communication

- (a) *NEMMCO* and the *System Operators* must record each telephone *operational communication* in the form of log book entries or by another auditable method which provides a permanent record as soon as practicable after making or receiving the *operational communication*.
- (b) Records of *operational communications* must include the time and content of each communication and must identify the parties to each communication.
- (c) Voice recordings of telephone *operational communications* may be undertaken by *NEMMCO* and the *System Operators*. *NEMMCO* and the *System Operators* must ensure that, when a telephone conversation is being recorded under this clause, the persons having the conversation receive an audible indication that the conversation is being recorded. Voice recordings may be used as an alternative to written logs.
- (d) *NEMMCO* and the *System Operators* must retain all *operational communications* records including voice recordings for a minimum of 7 years.
- (e) In the event of a dispute involving an *operational communication*, the records of that *operational communication* maintained by, or on behalf of, *NEMMCO* will constitute prima facie evidence of the contents of the *operational communication*.
- (f) Any recordings made in accordance with this clause 4.11.4 must be made in accordance with the provisions of all applicable privacy laws.

4.11.5 Agent communications

- (a) A *Registered Participant* may appoint an agent (called a “*Registered Participant Agent*”) to co-ordinate operations of one or more of its *facilities* on its behalf, but only with the prior written consent of *NEMMCO*.
- (b) A *Registered Participant* which has appointed a *Registered Participant Agent* may replace that *Registered Participant Agent* but only with the prior written consent of *NEMMCO*.
- (c) *NEMMCO* may only withhold its consent to the appointment of a *Registered Participant Agent* under clause 4.11.5(a) or (b) if it reasonably believes that the relevant person is not suitably qualified or experienced to operate the relevant *facility*.
- (d) For the purposes of the *Rules*, acts or omissions of a *Registered Participant Agent* are deemed to be acts or omissions of the relevant *Registered Participant*.
- (e) *NEMMCO* and its representatives (including authorised agents) may:

- (1) rely upon any communications given by a *Registered Participant Agent* as being given by the relevant *Registered Participant*; and
 - (2) rely upon any communications given to a *Registered Participant Agent* as having been given to the relevant *Registered Participant*.
- (f) *NEMMCO* and the *System Operators* are not required to consider whether any instruction has been given to a *Registered Participant Agent* by the relevant *Registered Participant* or the terms of those instructions.

4.12 Nomenclature Standards

- (a) A *Network Service Provider* must use the *nomenclature standards* for *transmission* equipment and apparatus as agreed with *NEMMCO* or, failing agreement, as determined by *NEMMCO*.
- (b) A *Registered Participant* must use reasonable endeavours to ensure that its *representatives* comply with the *nomenclature standards* in any *operational communications* with *NEMMCO*.
- (c) A *Registered Participant* must ensure that nameplates on its equipment relevant to operations at any point within the *power system* conform to the requirements set out in the *nomenclature standards*.
- (d) A *Registered Participant* must use reasonable endeavours to ensure that nameplates on its equipment relevant to operations at any point within the *power system* are maintained to ensure easy and accurate identification of equipment.
- (e) A *Registered Participant* must ensure that technical drawings and documentation provided to *NEMMCO* comply with the *nomenclature standards*.
- (f) *NEMMCO* may, by notice in writing, request a *Registered Participant* to change the existing numbering or nomenclature of *transmission* equipment and apparatus of the *Registered Participant* for purposes of uniformity, and the *Registered Participant* must comply with such a request provided that if the existing numbering or nomenclature conforms with the *nomenclature standards*, *NEMMCO* must pay all reasonable costs incurred in complying with the request.

4.13 Submission of Performance Standards

- (a) A *Generator*, *Customer* or *Market Network Service Provider* who, at the date that Tasmania becomes a *participating jurisdiction*, engages in the activity of owning, operating or controlling a *facility* located in Tasmania must, within 30 days of the date that Tasmania becomes a *participating jurisdiction*, submit to *NEMMCO* proposed *performance standards* for that *plant*, such *performance standards* to be:

- (1) in the case of a person who is registered as a *Generator* in relation to that *plant* – in accordance with schedule 5.2;
 - (2) in the case of a person who is registered as a *Customer* in relation to that *plant* – in accordance with schedule 5.3; or
 - (3) in the case of a person who is registered as a *Market Network Service Provider* in relation to that *plant* – in accordance with schedule 5.3a.
- (b) A *Network Service Provider* who plans, owns, operates or controls a *facility* that is connected to a *facility* planned, owned, controlled or operated by a *Generator*, *Customer* or *Market Network Service Provider* must provide that *Generator*, *Customer* or *Market Network Service Provider* with all performance data and other information, other than *confidential information*, reasonably required by the *Generator*, *Customer* or *Market Network Service Provider* to enable the *Generator*, *Customer* or *Market Network Service Provider* to satisfy its obligations under rule 4.13(a).

4.14 Acceptance of Performance Standards

- (a) *NEMMCO* must, following receipt of a proposed set of *performance standards* in accordance with rules 4.13(a) or 4.14(g), assess whether, in its reasonable opinion, each proposed *performance standard* satisfies the criteria set out in rule 4.14(b).
- (b) Subject to rule 4.14(c), for the purposes of rule 4.14(a), the *performance standards* must comply with:
- (1) the performance criteria set out in schedules 5.1, 5.2, 5.3 and 5.3a;
 - (2) any *derogation* applicable to the *plant* to which the *performance standards* apply;
 - (3) the *connection agreement* applicable to the *plant* to which the *performance standards* apply; and
 - (4) the design performance of the *plant* at the *performance standards commencement date*.
- (c) To the extent of any inconsistency between:
- (1) a *performance standard* determined in accordance with a *derogation* and a *performance standard* determined in accordance with:
 - (i) the performance criteria set out in schedules 5.1, 5.2, 5.3 and 5.3a;
 - (ii) the *connection agreement* applicable to the *plant* to which the *performance standard* applies; or

- (iii) the design performance of the *plant* at the *performance standards commencement date*,

the *performance standard* determined in accordance with the *derogation* will prevail;
 - (2) a *performance standard* determined in accordance with an existing *connection agreement* and a *performance standard* determined in accordance with:
 - (i) the performance criteria set out in schedules 5.1, 5.2, 5.3 and 5.3a; or
 - (ii) the design performance of the *plant* at the *performance standards commencement date*,

the *performance standard* determined in accordance with the *connection agreement* will prevail; and
 - (3) a *performance standard* determined in accordance with the design performance of the *plant* at the *performance standards commencement date* and a *performance standard* determined in accordance with the performance criteria set out in schedules 5.1, 5.2, 5.3 and 5.3a, the *performance standard* determined in accordance with the design performance of the *plant* will prevail.
- (d) *NEMMCO* must:
- (1) if it assesses that a proposed *performance standard* meets the criteria set out in rule 4.14(b), accept the proposed *performance standard*; or
 - (2) if it assesses that a proposed *performance standard* does not meet the criteria set out rule 4.14(b), reject the proposed *performance standard*.
- (e) *NEMMCO* must advise the person who submitted a proposed *performance standard*, in accordance with rule 4.13(a) or 4.14(g), of its decision to accept or reject the proposed *performance standard*, in accordance with rule 4.14(d), within 60 *business days* of submission of the proposed *performance standard* to *NEMMCO* in accordance with rule 4.13(a) or 4.14(g).
- (f) If *NEMMCO* rejects a proposed *performance standard*, in accordance with rule 4.14(d)(2), *NEMMCO* must, when advising the person in accordance with rule 4.14(e), also provide the person with detailed reasons for its decision to reject the proposed *performance standard*.
- (g) If *NEMMCO* rejects a proposed *performance standard* in accordance with rule 4.14(d)(2), the person who submitted the proposed *performance standard* to *NEMMCO* must, within 20 *business days* of the date upon

which *NEMMCO* made its decision to reject the proposed *performance standard*, resubmit an amended proposed *performance standard* in accordance with rule 4.13(a), taking *NEMMCO's* comments into consideration.

- (h) If, 11 months from the date that a person is required, in accordance with rule 4.13(a), to submit a proposed *performance standard*, a *performance standard* has not been approved in accordance with rule 4.14(d)(1), the *performance standard* for the *plant* to which the proposed *performance standard* related is deemed to be (in order of priority):
 - (1) the technical characteristics set out in the relevant *connection agreement*;
 - (2) if a *derogation* is in place, the *connection agreement* subject to the technical characteristics set out in the relevant *derogation*; or
 - (3) the *connection* requirements of the *connection point* determined in accordance with clause 5.3.3.
- (i) For the purposes of this rule 4.14, *NEMMCO* must accept a *performance standard* proposed by a *Registered Participant* materially based upon and consistent with a *derogation* applicable to the *plant* to which the *performance standard* applies.
- (j) *NEMMCO* may request that a *Registered Participant*, who has submitted a proposed *performance standard* in accordance with rules 4.13(a) or 4.14(g), provide additional supporting information reasonably required by *NEMMCO* to facilitate its assessment of the *performance standard* submitted.
- (k) A *Registered Participant* who receives a request from *NEMMCO*, in accordance with rule 4.14(j), must comply with the request within 5 *business days*.
- (l) A *Registered Participant* whose proposed *performance standard* is rejected in accordance with rule 4.14(d)(2) may dispute the decision by *NEMMCO* to reject the proposed *performance standard*.
- (m) If a dispute arising under rule 4.14(l) is not resolved in accordance with clause 8.2.4 within 60 *business days* then, notwithstanding any other provision in rule 8.2, the *Adviser* must refer the dispute to a *DRP* for determination in accordance with clauses 8.2.6A to 8.2.6D.
- (n) *NEMMCO* must establish and maintain a register of the *performance standards* applicable to *plant* as advised by *Registered Participants* in accordance with clause 5.3.7(g)(1) or established in accordance with rule 4.14.

- (o) *NEMMCO* or, in respect of a matter concerning the quality of *supply* to *Network Users*, *NEMMCO* in consultation with the relevant *Network Service Provider*, must, when determining the applicable *performance standard* for a particular requirement based on any provision of schedules 5.1, 5.2, 5.3 and 5.3a, require a *Registered Participant* to meet or exceed the *minimum access standard* but must not require the *Registered Participant* to exceed the relevant *automatic access standard* for that requirement.

4.15 Performance Standard Compliance

- (a) A *Registered Participant* must:
 - (1) ensure that its *plant* meets or exceeds the *performance standard* applicable to its *plant*;
 - (2) ensure that its *plant* is not likely to cause a material adverse effect on *power system security*; and
 - (3) immediately ensure that its *plant* ceases to be likely to cause a material adverse effect on *power system security*, if:
 - (i) the *Registered Participant* reasonably believes that its *plant* is likely to cause a material adverse effect on *power system security*; or
 - (ii) *NEMMCO* advises the *Registered Participant* that the *Registered Participant's plant* is likely to cause a material adverse effect on *power system security*.
- (b) A *Registered Participant* who engages in the activity of planning, owning, controlling or operating *plant* to which a *performance standard* applies must, within 6 months of the later of the date of the establishment of the *performance standard* in accordance with rule 4.14 or clause 5.3.4A(i) (as the case may be, the registration of the *performance standard* under rule 4.16 or 4.17) or the commencement of operation of the *plant*, institute and maintain a compliance program, in accordance with rule 4.15(c).
- (c) A compliance program instituted and maintained in accordance with rule 4.15(b) must:
 - (1) monitor the performance of the *plant* in accordance with the provisions of the compliance program;
 - (2) ensure that the *plant* complies with the relevant *performance standards*;
 - (3) be in accordance with *good electricity industry practice*; and
 - (4) provide reasonable assurance of ongoing compliance with each applicable *performance standard*.

-
- (d) The *AER* may request that a *Registered Participant*, who is required to institute and maintain a compliance program in accordance with rule 4.15(b) or clause 5.7.4(a1), deliver to the *AER*:
- (1) the compliance program records setting out the written results of the performance monitoring conducted in accordance with rule 4.15(f) or clause 5.7.4(a2)(1); and
 - (2) any other records maintained in accordance with clause 5.7.3 or clause 5.7.4, if applicable.
- (e) Each *Registered Participant* must maintain the compliance program records and any other records developed or maintained under clause 5.7.3 or clause 5.7.4 for 7 years and deliver such records to the *AER*, in accordance with rule 4.15(d), within 2 *business days* of the date of the request or such further period as the *AER* requires.
- (f) A *Registered Participant* who engages in the activity of planning, owning, controlling or operating *plant* to which a *performance standard* applies must immediately notify *NEMMCO* if:
- (1) the *Registered Participant* becomes aware that the *plant* is breaching a *performance standard* applicable to the *plant*; or
 - (2) the *Registered Participant* reasonably believes that the *plant* is likely to breach a *performance standard* applicable to the *plant*.
- (g) A notice in accordance with rule 4.15(f) must detail:
- (1) the reason for the actual or likely non-conformance of the *plant* with the *performance standard*;
 - (2) the actual or likely time of commencement of non-conformance of the *plant* with the *performance standard*;
 - (3) the expected duration of non-conformance of the *plant* with the *performance standard*; and
 - (4) the expected performance of the *plant* in comparison with the *performance standard*.
- (h) A *Registered Participant* who has notified *NEMMCO*, in accordance with rule 4.15(f), must notify *NEMMCO* that its *plant* has returned to compliance with the *performance standard* immediately following the return of the *plant* to compliance.
- (i) If:
- (1) a *Registered Participant* notifies *NEMMCO* in accordance with rule 4.15(f); or

- (2) *NEMMCO* otherwise reasonably believes that the *plant* of a *Registered Participant*, in respect of which a *performance standard* applies, is in breach of that *performance standard*,

NEMMCO must, in accordance with rule 4.15(j), advise the *Registered Participant* of the period within which the *Registered Participant* must rectify the breach.

- (j) *NEMMCO* must, when determining the period within which a *Registered Participant* may rectify a *performance standard* breach in accordance with rule 4.15(i), take into consideration:
- (1) the time necessary, in *NEMMCO*'s reasonable opinion, to provide the *Registered Participant* with the opportunity to remedy the breach; and
 - (2) the need to act to remedy the breach given the nature of the breach.
- (k) If the *plant* of a *Registered Participant* remains in breach of a *performance standard* for a period greater than that determined in accordance with rule 4.15(i), *NEMMCO* must notify the *AER* of the breach.
- (l) The effectiveness of a compliance regime established in accordance with rule 4.15(b) must be taken into consideration in any proceeding against a *Registered Participant* for a breach of rule 4.15(a).
- (m) Any obligation imposed on a *Generator* in accordance with clause 5.7.3(c) ceases to operate upon the commencement of a compliance program by the *Generator* in accordance with rule 4.15(b).

4.16 Transitioning arrangements for establishment of performance standards

4.16.1 Definitions

In this rule 4.16 and in rule 4.17:

actual capability of an eligible plant in respect of a performance requirement means the capability of the eligible plant in relation to that performance requirement when it is being operated under normal conditions in accordance with *good electricity industry practice*.

agreed performance standard means a standard of performance that:

- (a) is established as a result of that standard being accepted by *NEMMCO* in accordance with:
 - (1) rule 4.14(d)(1); or
 - (2) clause 4.14(d)(1) of the National Electricity Code; and
- (b) is in respect of a performance requirement.

deemed performance standard means a standard of performance that:

- (a) is established as a result of it being deemed to apply in accordance with:
 - (1) rule 4.14(h); or
 - (2) clause 4.14(h) of the National Electricity Code; and
- (b) is in respect of a performance requirement.

eligible plant means a *generating unit* (including a pumping generating unit) and *plant* associated with that *generating unit* in relation to which:

- (a) a person was registered as a *Generator* as at the *performance standards commencement date*; or
- (b) a *connection agreement* applied as at the *performance standards commencement date*.

Generator notice means a notice given by a *Generator* to *NEMMCO* in accordance with clause 4.16.3(c).

Generator reply notice means a notice given by a *Generator* to *NEMMCO* in accordance with clause 4.16.3(k).

initiating party has the meaning given to it in clause 4.17.2(a).

mandatory standard means a standard of performance in respect of a performance requirement that is not the subject of a *minimum access standard* or an *automatic access standard*.

National Electricity Code means the code of conduct called the National Electricity Code approved, in accordance with section 6(1) of the Old National Electricity Law, as the initial Code for the purposes of that Law, and as amended from time to time in accordance with its terms and the Old National Electricity Law.

NEMMCO notice means a notice given by *NEMMCO* to a *Generator* in accordance with clause 4.16.3(d).

NEMMCO reply notice means a notice given by *NEMMCO* to a *Generator* in accordance with clause 4.16.3(i).

Old National Electricity Law means the Schedule to the National Electricity (South Australia) Act 1996 (SA) as in force from time to time before the commencement of section 12 of the National Electricity (South Australia) (New National Electricity Law) Amendment Act 2005 (SA).

performance requirement means in the case of:

- (a) any *generating unit* (including a pumping generating unit) and *plant* associated with that *generating unit* – a requirement referred to in clause S5.2.5, S5.2.6, S5.2.8 or S5.2.9; and
- (b) a pumping generating unit and *plant* associated with that pumping generating unit – a requirement referred to in clause S5.3.3, S5.3.5, S5.3.6, S5.3.7 or S5.3.8.

performance standard requirements means the requirements set out in clause 4.16.5(c).

performance standards committee means the committee established by *NEMMCO* under clauses 4.17.1.

performance standards expert means a person engaged by *NEMMCO* under clause 4.17.1(j).

pumping generating unit means a *generating unit* that can also operate as a hydro-electric pump.

receiving party has the meaning given to it in clause 4.17.2(a).

register means the register of *performance standards* established and maintained by *NEMMCO* under rule 4.14(n).

registered performance standard in respect of an eligible plant means a *performance standard* (including any agreed performance standard or deemed performance standard) that is included in the register as being applicable to that eligible plant and that is in respect of a performance requirement.

4.16.2 Exclusions

For the avoidance of doubt:

- (a) this rule 4.16 does not apply in relation to any *performance standard* for an eligible plant where that *performance standard* applies to that eligible plant by virtue of clause 5.3.4A; and
- (b) nothing in this rule 4.16 is to be taken to preclude a *performance standard* that applies to an eligible plant by virtue of those clauses being amended or replaced in accordance with the *Rules*, in which case the *performance standard* as so amended or replaced supersedes the *performance standard* that applies to that eligible plant by virtue of this rule 4.16 or rule 4.17 (as the case may be).

4.16.3 Notification and acceptance of performance standards

Agreement as to performance standards

- (a) *NEMMCO* and a person who is registered as a *Generator* in relation to eligible plant may, at any time before 1 March 2007, agree to a performance standard in respect of a particular performance requirement that is to apply to that eligible plant without following the procedures set out in this clause 4.16.3, but that performance standard must be a standard which, based on the information available to *NEMMCO* at that time, is consistent with the performance standard requirements.
- (b) A performance standard that is agreed under paragraph (a) is to be taken as the *performance standard* in respect of the relevant performance requirement for that eligible plant and *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.
- (c) If, as at 1 March 2007:
 - (1) *NEMMCO* is not required to include the performance standard in the register under paragraph (b); and
 - (2) *NEMMCO* and the *Generator* have not agreed that no performance standard in respect of the relevant performance requirement is to apply to that eligible plant,

NEMMCO must give a written notice to the *Generator* of its intention to refer the determination of the performance standard to a performance standards expert.

NEMMCO notice

- (d) As soon as reasonably practicable but by no later than 29 December 2006, *NEMMCO* must give to each person who is registered as a *Generator* in relation to any eligible plant a written notice that specifies:
 - (1) the registered performance standards that apply to all eligible plants in relation to which that *Generator* is so registered;
 - (2) which of those registered performance standards *NEMMCO* requires the *Generator* to renegotiate under clause 4.16.5(i) and in which case *NEMMCO* must also specify:
 - (i) the *power system security* issue that *NEMMCO* is seeking to address; and
 - (ii) the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard that *NEMMCO* considers is required to address that *power system security* issue; and
 - (3) where:

- (i) a *performance standard* in respect of a particular performance requirement is not included in the register as being applicable to an eligible plant in relation to which that *Generator* is registered; and
 - (ii) *NEMMCO* considers that a performance standard in respect of that performance requirement should apply to that eligible plant,
- that performance requirement.

Generator notice

- (e) As soon as reasonably practicable but by no later than 5 January 2007, each person who is registered as a *Generator* in relation to any eligible plant must give to *NEMMCO* a written notice that specifies:
 - (1) each deemed performance standard in respect of a performance requirement which the *Generator* proposes as being applicable to any of its eligible plants, where that performance requirement is not the subject of a registered performance standard that applies to that eligible plant;
 - (2) those registered performance standards that apply to any of its eligible plant which the *Generator* requires *NEMMCO* to renegotiate under clause 4.16.5(k) – in which case the *Generator* must also specify:
 - (i) its best assessment of the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard; and
 - (ii) the lower performance standard that it is proposing in respect of that performance requirement,

and must include with its notice information that supports its assessment of the actual capability of that eligible plant;

 - (3) where *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies the actual capability of an eligible plant in respect of a performance requirement that *NEMMCO* considers is required to address a power system security issue, the *Generator's* best assessment of the actual capability of that eligible plant in respect of that performance requirement - in which case the *Generator* must also include with its notice information that supports its assessment of that actual capability; and
 - (4) where:

- (i) *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies a performance requirement under subparagraph (d)(3); and
- (ii) the *Generator* has not included in its notice a deemed performance standard in respect of that performance requirement that it considers applies to the eligible plant,

the performance standard (if any) that the *Generator* proposes in respect of that performance requirement.

(f) If:

- (1) the *Generator* does not state in a *Generator* notice that it requires a registered performance standard that applies to an eligible plant to be renegotiated under clause 4.16.5(k), and *NEMMCO* has not specified that standard in a *NEMMCO* notice as a registered performance standard that is to be renegotiated under clause 4.16.5(i), that registered performance standard is to be taken as the *performance standard* in respect of the relevant performance requirement for that eligible plant; or
- (2) the required actual capability of an eligible plant in respect of a performance requirement, as notified to the *Generator* under subparagraph (d)(2), is lower than or equal to the *Generator's* best assessment of the actual capability of that eligible plant in respect of that performance requirement,

then:

- (3) the required actual capability of the eligible plant in respect of that performance requirement, as notified to the *Generator* under subparagraph (d)(2), is to be taken as the *performance standard* in respect of that performance requirement for that eligible plant; and
- (4) *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.

Provision of connection agreements

(g) Where:

- (1) *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies the actual capability of an eligible plant in respect of a performance requirement that *NEMMCO* considers is required to address a *power system security* issue and the *performance standard* in respect of that performance requirement is not determined under subparagraphs (f)(2)-(4);

- (2) *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies a performance requirement under subparagraph (d)(3); or
- (3) a *Generator* gives *NEMMCO* a *Generator* notice that specifies a deemed performance standard under subparagraph (e)(1) or a registered performance standard under subparagraph (e)(2),

and

- (4) the *Generator* has not already provided to *NEMMCO* a copy of the current *connection agreement* that applies to the relevant eligible plant,

then the *Generator* must include with its *Generator* notice or if it does not give *NEMMCO* a *Generator* notice, provide to *NEMMCO* by no later than 5 January 2007, a copy of the current *connection agreement* that applies to the eligible plant.

- (h) The copy of the *connection agreement* referred to in paragraph (g) may be altered in such a way as to mask any commercial arrangements and is *confidential information*.

NEMMCO reply notice

- (i) As soon as reasonably practicable but by no later than the performance standards agreement date, *NEMMCO* must give to each person who is registered as a *Generator* in relation to any eligible plant a written notice that states:
 - (1) where the *Generator* has given *NEMMCO* a *Generator* notice that specifies a deemed performance standard under subparagraph (e)(1), whether *NEMMCO* accepts the deemed performance standard as proposed by the *Generator*;
 - (2) where the *Generator* has given *NEMMCO* a *Generator* notice that specifies a proposed lower performance standard under subparagraph (e)(2), whether *NEMMCO* accepts:
 - (i) the *Generator's* assessment of the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard; and/or
 - (ii) the lower performance standard that has been proposed by the *Generator*;
 - (3) where:
 - (i) the *Generator* has given *NEMMCO* a *Generator* notice that, under subparagraph (e)(3), specifies the *Generator's* best assessment of the actual capability of the eligible plant in respect of a performance requirement; and

- (ii) the required actual capability of the eligible plant in respect of that performance requirement, as notified to the *Generator* under subparagraph (d)(2), is higher than the *Generator's* assessment of the actual capability referred to in paragraph (1),

whether *NEMMCO* accepts the *Generator's* assessment;
- (4) where the *Generator* has given *NEMMCO* a *Generator* notice that specifies a proposed performance standard under subparagraph (e)(4), whether *NEMMCO* accepts that performance standard; and
- (5) where *NEMMCO* has given to the *Generator* a *NEMMCO* notice that specifies a performance requirement under subparagraph (d)(3) and the *Generator* has either:
 - (i) not proposed a performance standard under subparagraph (e)(4); or
 - (ii) not given a *Generator* notice to *NEMMCO*,the performance standard (if any) that *NEMMCO* proposes for that purpose.
- (j) If *NEMMCO* states in a *NEMMCO* reply notice that:
 - (1) it accepts a standard referred to in subparagraph (i)(1), (2) or (4), that standard is to be taken as the *performance standard* in respect of the relevant performance requirement for the eligible plant and *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant; or
 - (2) it accepts the *Generator's* assessment of the actual capability of an eligible plant in respect of a performance requirement as included in a *Generator* notice under subparagraph (e)(3),

and the *Generator's* assessment of that actual capability is lower than the required actual capability of the eligible plant in respect of that performance requirement as notified to the *Generator* under subparagraph (d)(2), then:
 - (3) the *Generator's* assessment of the actual capability of that eligible plant as referred to above is to be taken as the *performance standard* in respect of that performance requirement for that eligible plant; and
 - (4) *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.

Generator reply notice

- (k) Where *NEMMCO* has given a *Generator* a *NEMMCO* reply notice that specifies a proposed performance standard under subparagraph (i)(5), that *Generator* must, as soon as reasonably practicable but by no later than 15 January 2007, give written notice to *NEMMCO* which states whether it accepts that performance standard.
- (l) If the *Generator* states in a *Generator* reply notice that it accepts a standard referred to in paragraph (k), that standard is to be taken as the *performance standard* in respect of the relevant performance requirement for the eligible plant and *NEMMCO* must forthwith include that standard in the register as the performance standard in respect of that performance requirement for that eligible plant.

4.16.4 Actual capability

- (a) If *NEMMCO* notifies a *Generator* in a *NEMMCO* reply notice that it does not accept that the *Generator's* assessment of the actual capability of an eligible plant in respect of a particular performance requirement, then:
 - (1) the *Generator* and *NEMMCO* must seek to agree the actual capability of that eligible plant in respect of that performance requirement, taking into account (among other things) the results of relevant tests, the records of the operation of the plant, engineering reports, information provided by *Network Service Providers*, manufacturers' reports and the specifications of the plant or of similar plant; and
 - (2) if, within 20 *business days* of the giving of the *NEMMCO* reply notice, the *Generator* and *NEMMCO* have not agreed the actual capability of that eligible plant in respect of that performance requirement:
 - (i) they must seek to agree to the tests or engineering assessments that are to be undertaken for the purpose of establishing that actual capability and the time by which such tests or engineering assessments are to be completed; and
 - (ii) if, within 30 *business days* of the giving of the *NEMMCO* reply notice, they have not agreed to the tests or engineering assessments that are to be undertaken, or the time by which they are to be undertaken, the tests or engineering assessments, and the time by which they are to be undertaken, must be as specified by the *AER* in writing to the *Generator* and *NEMMCO*, such specification to be made at the written request of either the *Generator* or *NEMMCO* within 40 *business days* of the giving of the *NEMMCO* reply notice.
- (b) The *Generator* must use all reasonable endeavours, subject to complying with any other applicable provisions of the *Rules*, to have the tests or engineering assessments agreed or specified under subparagraph (a)(2)

undertaken as agreed or specified and must promptly provide the results of such tests or engineering assessments to *NEMMCO*.

- (c) The costs of undertaking the tests or engineering assessments and providing the results to *NEMMCO* as referred to in paragraph (b) must be borne by the *Generator*.
- (d) This clause 4.16.4 does not apply where both the *Generator* and *NEMMCO* agree that there is no need to determine the actual capability of the eligible plant in respect of a particular performance requirement.

4.16.5 Criteria for, and negotiation of, performance standards

Restrictions on NEMMCO regarding performance standards

- (a) *NEMMCO*:
 - (1) must, and must only, accept a deemed performance standard or a proposed performance standard under clause 4.16.3(i)(1), (2) or (4) if it is satisfied that, based on the information available to *NEMMCO* at that time, the standard is consistent with the performance standard requirements;
 - (2) must not propose a performance standard under clause 4.16.3(i)(5) unless it is satisfied that, based on the information available to *NEMMCO* at that time, the standard is consistent with the performance standard requirements,

and may only agree to a performance standard under clause 4.16.3(a)-(c) or as described in clause 4.17.3(f) if it is satisfied that, based on the information available to *NEMMCO* at that time, the standard is consistent with the performance standard requirements.

Preconditions to obligation to negotiate

- (b) If:
 - (1) *NEMMCO* does not state in a *NEMMCO* reply notice that it accepts a *Generator's* assessment of the actual capability of an eligible plant in respect of a performance requirement, as referred to in clause 4.16.3(i)(3), and the *Generator* is required to renegotiate the relevant registered performance standard pursuant to paragraph (i);
 - (2) *NEMMCO* does not state in a *NEMMCO* reply notice that it accepts a performance standard proposed by a *Generator*, as referred to in clause 4.16.3(i)(2), and *NEMMCO* is required to renegotiate the relevant registered performance standard pursuant to paragraph (k);

- (3) *NEMMCO* does not state in a *NEMMCO* reply notice that it accepts a deemed performance standard or a proposed performance standard, as referred to in clause 4.16.3(i)(1) or (4); or
- (4) a *Generator* does not state in a *Generator* reply notice that it accepts a proposed performance standard, as referred to in clause 4.16.3(k),

NEMMCO and the *Generator* must negotiate in good faith to agree the relevant performance standard in accordance with the performance standard requirements.

Criteria for performance standards

- (c) Subject to paragraphs (e) and (f), a performance standard referred to in paragraph (a) or negotiated in accordance with paragraph (b) must be the least onerous of:
 - (1) in the case of a performance standard other than a performance standard referred to in subparagraph (b)(1), the technical characteristics set out in the relevant connection agreement, subject to the technical characteristics set out in any applicable derogation;
 - (2) the relevant *automatic access standard*;
 - (3) the relevant mandatory standard; and
 - (4) the actual capability of the eligible plant in respect of the performance requirement the subject of the performance standard as accepted by *NEMMCO* in a *NEMMCO* reply notice, agreed by *NEMMCO* and the *Generator*, established in accordance with tests or engineering assessments agreed or specified under clause 4.16.4(a)(2), or determined by a performance standards expert.
- (d) As a result of the application of paragraph (c), and notwithstanding anything else to the contrary in the *Rules*, the relevant performance standard may be less than the relevant *minimum access standard* or mandatory standard.
- (e) The performance standard may be such other standard of performance as is agreed by *NEMMCO* and the *Generator* and as is higher than that which complies with the requirements set out in paragraphs (c) and (d).
- (f) *NEMMCO* and the *Generator* may agree that a performance requirement is not applicable to an eligible plant, with the result that no *performance standard* in respect of that performance requirement is required for that eligible plant.

Provision of information

- (g) For the purpose of facilitating the negotiations referred to in paragraph (b), the *Generator* must provide to *NEMMCO* as soon as reasonably practicable

but by no later than 22 January 2007, a copy of the current *connection agreement* that applies to the relevant eligible plant and details of the design performance of the eligible plant.

- (h) The obligation in paragraph (g) does not apply to the extent the *Generator* has already provided such documents and information to *NEMMCO* and the copy of the *connection agreement* may be altered in such a way as to mask any commercial arrangements and is *confidential information*.

When NEMMCO may require renegotiation of registered performance standard

- (i) *NEMMCO* may only require a *Generator* to renegotiate a registered performance standard pursuant to a *NEMMCO* notice if:
 - (1) the registered performance standard is lower than what *NEMMCO* considers, based on the information available to it, to be the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard; and
 - (2) *NEMMCO* is satisfied that a higher performance standard in respect of that performance requirement is required to address a *power system security* issue.
- (j) Notwithstanding paragraph (i), a *Generator* is not required to (but may nevertheless agree to) renegotiate a registered performance standard pursuant to that clause if the actual capability of that eligible plant in respect of the performance requirement as agreed by *NEMMCO* and the *Generator*, or as established in accordance with tests or engineering assessments agreed or specified under clause 4.16.4(a)(2), is lower than the registered performance standard.

When Generator may require renegotiation of performance standard

- (k) A *Generator* may only require *NEMMCO* to renegotiate a registered performance standard pursuant to a *Generator* notice if the registered performance standard is higher than the *Generator's* best assessment of the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard.
- (l) Notwithstanding paragraph (k), *NEMMCO* is not required to (but may nevertheless agree to) renegotiate a registered performance standard pursuant to that clause if the actual capability of that eligible plant in respect of the performance requirement as agreed by *NEMMCO* and the *Generator*, or as established in accordance with tests or engineering assessments agreed or specified under clause 4.16.4(a)(2), is higher than the registered performance standard.

Consequences of agreeing performance standard

- (m) If *NEMMCO* and a *Generator* agree a performance standard in respect of a performance requirement for any eligible plant under this clause 4.16.5, that performance standard is to be taken as the *performance standard* in respect of that performance requirement for the eligible plant and *NEMMCO* must forthwith include that standard in the register as the performance standard in respect of that performance requirement for that eligible plant.

4.16.6 Consultation with and assistance by Network Service Providers

- (a) Before *NEMMCO*:
 - (1) accepts or agrees to a performance standard under this rule 4.16 or as described in clause 4.17.3(d); or
 - (2) agrees that a performance requirement is not applicable to an eligible plant under clause 4.16.5(f),

NEMMCO must notify the *Network Service Provider* to whose network the relevant eligible plant is directly *connected* and give that *Network Service Provider* a reasonable opportunity to provide its views on that matter to *NEMMCO*.

- (b) As soon as reasonably practicable after including a performance standard for an eligible plant in the register under this rule 4.16 or rule 4.17, *NEMMCO* must give written notice of that performance standard to the *Network Service Provider* to whose *network* that eligible plant is directly *connected*.
- (c) If requested to do so by *NEMMCO* or a *Generator*, a *Network Service Provider* must use its reasonable endeavours to provide such assistance as is requested in connection with the proposal, negotiation, acceptance or agreement of a performance standard under this rule 4.16 or as described in clause 4.17.3(d).

4.16.7 Referral to expert determination

- (a) If:
 - (1) in accordance with clause 4.16.5(b), *NEMMCO* and a *Generator* are required to negotiate to agree a performance standard in respect of a particular performance requirement for an eligible plant;
 - (2) *NEMMCO* and the *Generator* have not agreed under clause 4.16.5(f) that such a performance requirement is not applicable to that eligible plant; and
 - (3) as at 29 January 2007, *NEMMCO* is not required under clause 4.16.5(m) to include in the register a performance standard for that eligible plant that is in respect of that performance requirement,

the *Generator* may give a written notice to *NEMMCO* (or *NEMMCO* may give a written notice to the *Generator*) of its intention to refer the determination of the performance standard in respect of the performance requirement to a performance standards expert.

- (b) If:
- (1) in accordance with clause 4.16.5(b), *NEMMCO* and a *Generator* are required to negotiate to agree a performance standard in respect of a particular performance requirement for an eligible plant;
 - (2) *NEMMCO* and the *Generator* have not agreed under clause 4.16.5(f) that such a performance requirement is not applicable to that eligible plant; and
 - (3) as at 1 March 2007, *NEMMCO* is not required under clause 4.16.5(m) to include in the register a performance standard for that eligible plant that is in respect of that performance requirement,

NEMMCO must give a written notice to the *Generator* of its intention to refer the determination of the performance standard in respect of the performance requirement to a performance standards expert.

4.16.8 Prior actions

If the *AEMC*, the *AER*, *NEMMCO* or a *Registered Participant* takes any action to enable any entity to perform functions under, or obligations imposed by, this rule 4.16 or rule 4.17 before 7 December 2006 in anticipation of the relevant provision applying on the performance standards transition commencement date, and the action was taken so far as reasonably practicable in accordance with the provision (as though the provision applied at the time the relevant action was taken), then the action is deemed to have been validly taken in accordance with that provision with effect on and from 7 December 2006.

4.16.9 Deemed performance standards

A deemed performance standard for any eligible plant:

- (a) that is in respect of a particular performance requirement; and
- (b) that is included in the register as at the performance standards transition commencement date,

is to be taken to be the performance standard in respect of that performance requirement for that eligible plant for the purposes of the *Rules* unless it is subsequently amended or replaced in accordance with the *Rules*.

4.16.10 Modification of connection agreements

- (a) Notwithstanding clause 5.2.2(c) and subject to paragraph (b), a *connection agreement* that applies to any eligible plant is to be taken to include:
- (1) such *performance standards* for that eligible plant as are included in the register under this rule 4.16 or rule 4.17; and
 - (2) except to the extent they have been superseded by a *performance standard* referred to in subparagraph (1), such *performance standards* for that eligible plant as are included in the register as at the performance standards transition commencement date,
- and those *performance standards* prevail over any other standards of performance that are included in that *connection agreement* to the extent of any inconsistency between them.
- (b) Clause 4.16.10(a) does not apply to the extent a *performance standard* that is taken to be included in a *connection agreement* under that clause is subsequently amended or replaced in accordance with the *Rules*.

4.17 Expert determination

4.17.1 Performance standards committee and appointment of performance standards experts

- (a) As soon as reasonably practicable but by no later than 10 January 2007, *NEMMCO* must establish a committee comprising six members (the '**performance standards committee**').
- (b) The six members must consist of:
- (1) two persons appointed to represent *NEMMCO*, one of whom is appointed as the chairperson of the committee;
 - (2) two persons appointed to represent *Generators*; and
 - (3) two persons appointed to represent *Network Service Providers*.
- (c) A decision of the performance standards committee to nominate a person as a performance standards expert must be made:
- (1) at a meeting of the performance standards committee; and
 - (2) by at least two thirds of the number of members who attend the meeting.
- (d) A quorum for a meeting of the performance standards committee consists of one member from each of the categories referred to in subparagraph (b)(1) to (3).

-
- (e) The chairperson of the performance standards committee:
- (1) is responsible for all procedural matters; and
 - (2) without limiting subparagraph (1), may determine that a member or members may participate in, and form any part of the quorum for, a meeting of the performance standards committee 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 the other members at that meeting.
- (f) If a member of the performance standards committee resigns or otherwise ceases to be able or available to perform the functions of a member for more than 2 consecutive meetings of the committee, *NEMMCO* must, as soon as reasonably practicable, appoint another person to replace that member.
- (g) As soon as reasonably practicable after it is established, the performance standards committee must nominate at least two persons as performance standards experts.
- (h) The performance standards committee must:
- (1) from time to time nominate such number of persons as performance standards experts as is necessary to ensure that the number of performance standards experts at any time is no less than two; and
 - (2) at the request of *NEMMCO*, nominate such additional number of persons as performance standards experts as *NEMMCO* requires.
- (i) If the performance standards committee:
- (1) fails to nominate at least two persons as performance standards experts within 30 *business days* of the committee being established; or
 - (2) where the number of performance standards experts is reduced to less than two – fails, within 30 *business days* of such reduction occurring, to nominate such number of persons as performance standards experts as is necessary to restore the number of performance standards experts to two,
- NEMMCO* must request the *AER* in writing to nominate the requisite number of persons as performance standards experts and the *AER* must nominate that number of performance standards experts as soon as reasonably practicable.
- (j) *NEMMCO* must engage a performance standards expert nominated under this clause 4.17.1 for the purpose of performing the functions of a performance standards expert under this rule 4.17.

- (k) *NEMMCO* must notify the *AER* in writing of each performance standards expert that it engages under paragraph (j).
- (l) The performance standards committee will cease to exist one month after 1 June 2007.

4.17.2 Referral to performance standards expert

- (a) Where *NEMMCO* or a *Generator* gives a notice under clause 4.16.3(c) or clause 4.16.7 of its intention to refer the determination of a performance standard to a performance standards expert, the party giving the notice (the '**initiating party**') and the party to whom the notice is given (the '**receiving party**') must seek to agree on a performance standards expert to determine the performance standard.
- (b) If:
 - (1) 5 *business days* from the giving of the notice under clause 4.16.3(c) or clause 4.16.7 (as the case may be) have elapsed; and
 - (2) the initiating party and the receiving party have not agreed on a performance standards expert to determine the performance standard,then the initiating party or the receiving party may request the *AER* in writing to nominate a performance standards expert to determine the performance standard, in which case:
 - (3) the *AER* must make such nomination by notice in writing given to both the initiating party and the receiving party within 5 *business days* of the *AER* receiving the request to do so; and
 - (4) the nominated performance standards expert will determine the performance standard.
- (c) Within 5 *business days* of the selection of the performance standards expert who will determine the performance standard, or within such longer time as the performance standards expert may agree, the initiating party and the receiving party must each give to the performance standards expert a written submission as to the performance standard they contend should be adopted and the reasons (together with supporting evidence) for that contention.

4.17.3 Determinations of performance standards experts

- (a) The initiating party, the receiving party and any *Network Service Provider* required to do so by the performance standards expert must promptly supply the performance standards expert with any information, assistance and cooperation requested in writing by the performance standards expert in connection with its determination of a performance standard.

-
- (b) The performance standards expert must determine the performance standard in accordance with the performance standard requirements. For these purposes the performance standards expert may, without limitation:
- (1) determine the actual capability of the eligible plant in respect of the performance requirement the subject of the performance standard; or
 - (2) determine that a performance requirement is not applicable to the relevant eligible plant, with the result that no performance standard in respect of that performance requirement is required for that eligible plant.
- (c) The performance standards expert must, as soon as reasonably practicable but no later than 1 June 2007, determine the performance standard and provide *NEMMCO* and the *Generator* with its written determination (including reasons).
- (d) The performance standards expert must not determine a performance standard in respect of a performance requirement for an eligible plant if, prior to making that determination, *NEMMCO* and the *Generator* notify the expert in writing that they have agreed to the relevant performance standard.
- (e) A performance standard in respect of a particular performance requirement that is:
- (1) agreed as described in paragraph (d); or
 - (2) determined by a performance standards expert,
- is to be taken as the performance standard in respect of that performance requirement for the relevant eligible plant and *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.
- (f) Not later than 1 July 2007, a performance standards expert must provide a summary of each determination it makes under this rule 4.17 to *NEMMCO* and *NEMMCO* must *publish* that summary as soon as is reasonably practicable.
- (g) A summary under paragraph (f) must only include the following information:
- (1) the name of the relevant *Generator*;
 - (2) the name or a description of the eligible plant; and
 - (3) the performance requirement that is the subject of the performance standard that has been determined by the performance standards expert for that eligible plant.

4.17.4 Other matters

- (a) To the extent permitted by law, a performance standards expert is not 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 the performance standards expert that was done in good faith in connection with the determination of a performance standard.
- (b) Before proceeding to determine a performance standard, a performance standards expert may require the initiating party and the receiving party to execute a release and indemnity in relation to any loss, damage or liability that the performance standards expert might, but for the release and indemnity, suffer or incur as a consequence of any act or omission of the performance standards expert that was done in good faith in connection with the determination of the performance standard.
- (c) As part of its engagement by *NEMMCO*, a performance standards expert must enter into a confidentiality deed with *NEMMCO*, for the benefit of *NEMMCO* and each *Generator* in respect of which the performance standards expert determines a performance standard, under which it undertakes to keep confidential all information provided to it for the purposes of determining any performance standard except to the extent that the disclosure of such information is necessary for the purposes of the summary referred to in clause 4.17.3(f).
- (d) The costs of the performance standards expert must be borne equally as between *NEMMCO* and National Generators Forum Limited (ACN 113 331 623).

CHAPTER 9

9. Jurisdictional Derogations and Transitional Arrangements

9.1 Purpose and Application

9.1.1 Purpose

- (a) This Chapter contains the *jurisdictional derogations* that apply in relation to each *participating jurisdiction*.
- (b) This Chapter prevails over all other Chapters of the *Rules*.

9.1.2 Jurisdictional Derogations

The *jurisdictional derogations* that apply in relation to each *participating jurisdiction* are set out in this Chapter as follows:

- (a) Part A - Victoria;
- (b) Part B - New South Wales;
- (c) Part C - Australian Capital Territory;
- (d) Part D - South Australia;
- (e) Part E - Queensland; and
- (f) Part F – Tasmania.

Part G sets out the Schedules to this Chapter 9.

Part A – Jurisdictional Derogations for Victoria

9.2 [Deleted]

9.3 Definitions

9.3.1 General Definitions

For the purposes of this Part A:

- (1) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and
- (2) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
Counterparties	In relation to the <i>Smelter Agreements</i> , means Portland Smelter Services Pty Ltd, Alcoa of Australia Limited or any other party to one or more of the <i>Smelter Agreements</i> (other than <i>SEC</i>).
CPI	The Consumer Price Index: All Groups Index Number Melbourne compiled by the Australian Bureau of Statistics.
distribution licence	A <i>licence</i> to distribute and supply electricity.
Distributor	A person who holds a <i>distribution licence</i> .
EI Act	Electricity Industry Act 2000 (Vic).
EI (RP) Act	Electricity Industry (Residual Provisions) Act 1993 (Vic).
ESC	The Essential Services Commission established under section 7 of the <i>ESC Act</i> .
ESC Act	The Essential Services Commission Act 2001 (Vic).
Information requirements guidelines	The <i>submission guidelines</i> referred to in clause 6A.10.2.
licence	A licence within the meaning of the <i>EI Act</i> or deemed to be issued under the <i>EI Act</i> by operation of clause 5 of Schedule 4 to the <i>EI (RP) Act</i> .
maximum allowable aggregate revenue	The maximum allowable aggregate revenue for a <i>financial year</i> or <i>relevant regulatory period</i> (as the case may be) determined under clause 9.8.4C(d), as adjusted from time to time under clause 9.8.4C(g3) or (g4).
Quarter	The respective 3 monthly periods adopted by the Australian Bureau of Statistics for the compilation and issue of the CPI.

Column 1	Column 2
Regulated owner	An owner (whether <i>SPI PowerNet</i> or any other person) of the <i>Victorian Transmission Network</i> or a part of the <i>Victorian Transmission Network</i> : (a) who transmits electricity pursuant to a <i>transmission exemption</i> or <i>transmission licence</i> ; (b) who is subject to the operation of the <i>Rules</i> ; and (c) whose <i>aggregate annual revenue requirement</i> for <i>transmission services</i> is regulated under Chapter 6.
relevant regulatory period	A period comprising not less than 5 <i>financial years</i> .
SEC	State Electricity Commission of Victoria established under the State Electricity Commission Act 1958 (Vic).
shared network services	Services relating to the use of the <i>Victorian Transmission Network</i> or a part of the <i>Victorian Transmission Network</i> provided by a <i>Regulated owner</i> to <i>VENCorp</i> , whether in accordance with a <i>transmission exemption</i> or <i>transmission licence</i> or under an agreement with <i>VENCorp</i> .
shared transmission network use charges	Charges for the locational and non-locational components of <i>prescribed TUOS services</i> and/or <i>prescribed common transmission services</i> and any other charges through which <i>VENCorp</i> is allowed, under Part J of Chapter 6A as modified by clause 9.8.4F, to recover any proportion of its <i>maximum allowable aggregate revenue</i> .
Smelter Agreements	Agreements, contracts and deeds referred to in Part A of schedule 3 to the <i>EI (RP) Act</i> in their form as at 1 July 1996 other than the Portland and Point Henry Flexible Tariff Deeds between <i>SEC</i> and the State Trust Corporation of Victoria.
Smelter Trader	<i>SEC</i> in its capacity as <i>Smelter Trader</i> .
SPI PowerNet	<i>SPI PowerNet Pty Ltd</i> (ACN 079 798 173), or any successor or assignee of any asset of <i>SPI PowerNet</i> used for the provision of <i>transmission services</i> .

Column 1	Column 2
statutory electricity transmission-related costs	<p>In relation to <i>VENCorp</i>, the sum of the following costs for a <i>relevant regulatory period</i>:</p> <ol style="list-style-type: none"> (1) <i>VENCorp's</i> aggregate actual costs in operating and planning the <i>Victorian Transmission Network</i>; (2) all <i>network</i> charges payable by <i>VENCorp</i> to <i>SPI PowerNet</i> or any other owner of the <i>Victorian Transmission Network</i> or a part of the <i>Victorian Transmission Network</i>, including charges relating to <i>augmentations</i>; (3) all other charges payable by <i>VENCorp</i> to providers of <i>network</i> support services and other services which <i>VENCorp</i> uses to provide <i>network services</i> that are <i>transmission services</i>; and (4) any other costs that directly arise out of <i>VENCorp's</i> functions under the <i>EI Act</i> relating to the transmission of electricity, the application of the <i>Rules</i> to <i>VENCorp</i> or the conditions imposed on <i>VENCorp</i> under its <i>transmission licence</i> relating to the transmission of electricity, for which there is no alternative method (legislative or contractual) for the recovery of those costs.
System Code	The code of that name sealed by the Office of the Regulator-General under the Office of the Regulator-General Act 1994 (Vic) on 3 October 1994 and saved and continued in operation by section 67 of the <i>ESC Act</i> .
Tariff Order	Has the same meaning as in the <i>EI Act</i> .
transmission exemption	An exemption granted under section 17 of the <i>EI Act</i> under which the person to whom it has been granted is exempted from the requirement to obtain a <i>licence</i> to transmit electricity.
transmission licence	A <i>licence</i> to transmit electricity.
VENCorp	Victorian Energy Networks Corporation established under Division 2A of Part 2 of the Gas Industry Act 1994 (Vic) and continued under Part 8 of the Gas Industry Act 2001 (Vic).
Victorian Distribution Network	In relation to a person that holds a <i>distribution licence</i> , the <i>distribution systems</i> in Victoria to which that <i>licence</i> relates and includes any part of those systems.
Victorian Minister	The Minister who, for the time being, administers the National Electricity (Victoria) Act 1997 (Vic).
Victorian Switching Operator	The person or persons who operate the Victorian Network Switching Centre.

Column 1	Column 2
Victorian Transmission Network	The <i>transmission systems</i> situated in whole or in part in Victoria in respect of which <i>VENCorp</i> (or any successor entity appointed by Victoria to carry out those functions) exercises the functions specified in clause 9.3.2(a)(1)(i) and part 1 of the table in clause 9.3.2, and includes any part of those <i>transmission systems</i> .
Wholesale Metering Code	The code of that name sealed by the Office of the Regulator-General under the Office of the Regulator-General Act 1994 (Vic) on 3 October 1994, as in force immediately before <i>market commencement</i> .

9.3.2 Network Service Provider

- (a) For a provision of the *Rules* that refers to a *Network Service Provider*, in determining the *Network Service Provider* in relation to the *Victorian Transmission Network* or a part of the *Victorian Transmission Network*, the following rules apply:
- (1) subject to this clause and to anything to the contrary in the *Rules* or this Part A, the *Network Service Provider* is:
 - (i) *VENCorp*, if the provision relates to:
 - (A) the planning, development or *augmentation* of a *transmission network* or part of a *transmission network*; or
 - (B) the provision of *common services* or *network services* that are *transmission services* (other than *entry services* or *exit services*);
 - (ii) *SPI PowerNet* or any other owner of the *Victorian Transmission Network* or a part of the *Victorian Transmission Network*, if the provision relates to:
 - (A) the *connection* to, or modification of a *connection* to, a *transmission system*; or
 - (B) the provision of *connection services*;

- (iii) *SPI PowerNet*, if the provision relates to any function of, or service provided by, the *Victorian Switching Operator* in respect of the *Victorian Transmission Network* or a part of the *Victorian Transmission Network*;
- (2) in the case of each clause of the *Rules* referred to in part 1 of the following table, as modified by the description in that table, the *Network Service Provider* is *VENCorp*;
- (3) in the case of each clause of the *Rules* referred to in part 2 of the following table, as modified by the description in that table, the *Network Service Provider* is *SPI PowerNet* or any other owner of the *Victorian Transmission Network* or part of the *Victorian Transmission Network*; and
- (4) in the case of each clause of the *Rules* referred to in part 3 of the following table, as modified by the description in that table, the *Network Service Provider* is the *Victorian Switching Operator*.

Clause	Clause Description
Part 1 (VENCorp)	
3.13.3(d), (e), (f)(1), (f)(2), (g)(so far as it applies to clauses 3.13.3(f)(1) and (f)(2) and (i))	Standing data concerning expected network capability
4.5.1(b) and (c)	Determining the limits of the operation of the <i>power system</i> associated with <i>voltage</i> failure and translation of limits into key location operational settings or limits
4.7.1(a)	Submission of settings for <i>plant</i> required to maintain <i>power system</i> stability
5.2.3(b)	<i>Power system</i> performance and quality of <i>supply</i> standards of <i>transmission network</i>
5.2.3(d)(12), 5.6.2(n)	Reports about <i>network augmentation</i>
5.6.1	Forecasts for <i>connection points</i> to <i>transmission network</i>
5.6.2	Development of <i>networks</i> within a <i>region</i>
5.6.2A (except 5.6.2A(b)(2))	<i>Annual Planning Reports</i> for that part of the <i>transmission network</i> used for the provision of <i>common services</i> or <i>network services</i> that are <i>transmission services</i> (other than <i>entry services</i> or <i>exit services</i>)
5.6.6	Planning for the development, construction or <i>augmentation</i> of <i>new large transmission</i>

Clause	Clause Description
	<i>network assets that are not connection assets</i>
5.6.6A	Planning for the development, construction or <i>augmentation of new small transmission network assets that are not connection assets</i>
5.6.6B	Planning for the development, construction or <i>augmentation of funded augmentations that are not connection assets</i>
5.7.6	Tests of <i>generating units</i> requiring changes to normal operation
5.7.7 (except 5.7.7(e))	Inter-regional <i>power system tests</i>
Schedule 5.1, clause S5.1.2.3	<i>Power transfer capability between regions</i>
Schedule 5.3, clause S5.3.5	Power factor requirements of <i>loads</i>

Clause	Clause Description
Part 2 (SPI PowerNet or any other owner of the Victorian Transmission Network or part of the Victorian Transmission Network)	
4.6.5	Partial outage of power protection systems
4.11.1	Remote control and monitoring devices
4.11.2(a) and (d)	Provision and maintenance of communications facilities for control, operational metering and indications from local sites
5.2.3(e) and (e1) (except 5.2.3(e1)(2))	Management, maintenance, operation and restoration of <i>network</i>

Clause	Clause Description
Part 3 (Victorian Switching Operator)	
4.3.1(d)	High voltage switching procedures and arrangements
5.9.3	Involuntary disconnection
5.9.4	Disconnection to implement a court order
5.9.6	Obligation to reconnect
Schedule 5.1, clause S5.1.10.3(a)	Functional testing of <i>load shedding facilities</i>
Schedule 5.2, clause S5.2.3(8)	Switching and <i>isolation facilities</i>

- (b) Notwithstanding anything in clause 9.3.2(a), the obligations of *VENCorp*, *SPI_PowerNet* and any other owner of the *Victorian Transmission Network* or part of the *Victorian Transmission Network* under the *Rules* are several, and not joint nor joint and several.
- (c) *VENCorp*:
 - (1) is a *Network Service Provider* in respect of the provisions of the *Rules* as set out in clause 9.3.2(a), even when *VENCorp* does not own, control or operate a *transmission system*; and
 - (2) is required to be registered by *NEMMCO* as a *Network Service Provider* under clause 2.5, even when *VENCorp* does not own, control or operate a *transmission system*.

9.4 Transitional Arrangements for Chapter 2 - Registered Participants, Registration and Cross Border Networks

9.4.1 [Deleted]

9.4.2 Smelter Trader

- (a) For the purposes of the *Rules*:
 - (1) *Smelter Trader* is deemed to be entitled to register as a *Customer* in respect of the *connection points* used to supply the electricity supplied under the *Smelter Agreements*;
 - (2) *Smelter Trader* is deemed to be registered as a *Customer* and as a *Market Customer* in relation to the electricity supplied under the *Smelter Agreements*;
 - (3) the electricity supplied under the *Smelter Agreements* is deemed to have been classified as a *market load* and the *connection points* used to supply that electricity are deemed to have been classified as *Smelter Trader's market connection points*;
 - (4) *Smelter Trader* is deemed to be the person that must register as the *Generator* in relation to the *generating systems* forming part of Anglesea Power Station;
 - (5) *Smelter Trader* is deemed to be registered as a *Generator* and a *Market Generator* in relation to the *generating systems* forming part of the Anglesea Power Station;
 - (6) *Smelter Trader* is only a *Market Generator* in respect of the *generating systems* forming part of the Anglesea Power Station to the extent to which the electricity generated by those *generating systems*

is available to the *Smelter Trader* for sale under the *Smelter Agreements*;

- (7) none of the *Counterparties* is or is to be taken to be entitled to become a *Market Participant*, an *Intending Participant* or a *Customer* in respect of the electricity supplied under the *Smelter Agreements*;
 - (8) none of the *Counterparties* or any person that operates or controls the *generating systems* forming part of the Anglesea Power Station (other than *Smelter Trader*) is or is to be taken to be entitled to register as a *Generator* in relation to the *generating systems* forming part of the Anglesea Power Station; and
 - (9) each of the *Counterparties* and any person that owns, controls or operates the *generating systems* forming part of the Anglesea Power Station (other than *Smelter Trader*) is taken to have been exempted from the requirement to register as a *Generator* in relation to the *generating systems* forming part of the Anglesea Power Station.
- (b) This clause 9.4.2 ceases to have effect upon the termination of the last of the *Smelter Agreements*.

9.4.3 **Smelter Trader: compliance**

- (a) If complying with a requirement of the *Rules* (the “Rules Requirement”) would result in the *Smelter Trader* being in breach of a provision of one or more of the *Smelter Agreements* (the “Contractual Requirement”), then the *Smelter Trader* is not required to comply with the Rules Requirement to the extent of the inconsistency between the Rules Requirement and the Contractual Requirement.
- (b) If the *Smelter Trader* does not comply with a Rules Requirement in the circumstances described in clause 9.4.3(a), then the *Smelter Trader* must:
 - (1) give written notice to the *AER* of:
 - (i) the Rules Requirement which has not been complied with;
 - (ii) details of each act or omission which partly or wholly constitutes non-compliance with that Rules Requirement; and
 - (iii) details of each Contractual Requirement which is said by the *Smelter Trader* to be inconsistent with the Rules Requirement,as soon as practicable and in any event within 30 *days* after the non-compliance with the Rules Requirement occurs or commences; and
 - (2) provide the *AER* with any documents or information in the possession or control of the *Smelter Trader* which evidence the matters referred

to in clause 9.4.3(b)(1) within 14 *days* (or any longer period agreed by the *AER*) of receiving a written request from the *AER*.

(c) If:

- (1) the *Smelter Trader* requires the co-operation of a *Counterparty* to a *Smelter Agreement* to comply with a requirement of the *Rules*;
- (2) the *Smelter Trader* has used reasonable endeavours to obtain the *Counterparty's* co-operation in order to enable the *Smelter Trader* to comply with that requirement; and
- (3) under the *Smelter Agreements*, *SEC* has no ability to require the *Counterparty* to so co-operate with *SEC* and the *Counterparty* is not in breach of the *Smelter Agreements* by refusing to so co-operate with *SEC*,

then the *Smelter Trader* is not required to comply with that requirement.

(d) If the *Smelter Trader* does not comply with a requirement of the *Rules* in the circumstances described in clause 9.4.3(c), then the *Smelter Trader* must:

- (1) give written notice to the *AER* of:
 - (i) the requirement of the *Rules* that has not been complied with;
 - (ii) details of each act or omission which partly or wholly constitutes non-compliance with that requirement of the *Rules*; and
 - (iii) details of the endeavours made by the *Smelter Trader* to obtain the co-operation of the *Counterparty* to enable the *Smelter Trader* to comply with the requirement of the *Rules*,

as soon as reasonably practical and in any event before the expiration of 30 *days* after the non-compliance with the requirement of the *Rules* occurs or commences; and

- (2) provide the *AER* with any documents or information in the possession or control of the *Smelter Trader* which evidence the matters referred to in clause 9.4.3(d)(1) within 14 *days* (or any longer period agreed by the *AER*) of receiving a written request from the *AER*.

(e) To avoid any doubt, if:

- (1) after reviewing any written notice provided by the *Smelter Trader* under clause 9.4.3(b)(1) and any additional documents or information provided by the *Smelter Trader* under clause 9.4.3(b)(2), the *AER* forms the view that compliance with the relevant *Rules Requirement*

would not have resulted in the *Smelter Trader* being in breach of the relevant Contractual Requirement; or

- (2) after reviewing any written notice provided by the *Smelter Trader* under clause 9.4.3(d)(1) and any additional documents or information provided by the *Smelter Trader* under clause 9.4.3(d)(2), the *AER* forms the view that any of the requirements of clause 9.4.3(c) were not satisfied in respect of the subject of the notice,

then the matter may be dealt with by the *AER* as a breach of the *Rules*.

- (f) The *Smelter Trader* must give any notice or other information required to be given under this clause 9.4.3 (called in this clause “required information”) in advance if it becomes aware of the potential for the circumstances giving rise to its obligation to give the required information to arise. If any required information is given under this clause 9.4.3(f), then:
 - (1) the required information is taken to have been given in accordance with this clause 9.4.3; and
 - (2) notwithstanding clause 9.4.3(f)(1), notice must be given of the non-compliance and further information provided to the *AER* upon request under clause 9.4.3(b) or clause 9.4.3(d) (as the case may be) after the non-compliance occurs or commences.
- (g) If non-compliance with the *Rules* is continuing, the notice of non-compliance with the *Rules* provided under clause 9.4.3(b) or clause 9.4.3(d) (as the case may be) will be effective in relation to that non-compliance until that non-compliance ends if the relevant notice specifies that the non-compliance is continuing. The *Smelter Trader* must notify the *AER* of the end of the non-compliance no later than 30 *days* after the non-compliance ends.
- (h) Clauses 9.4.3(a) and 9.4.3(c) do not affect *SEC*’s obligations with respect to registration with *NEMMCO* or making payments in respect of *Participant fees, prudential requirements* or *settlement amounts*.

9.4.4 Report from AER

Within 30 *days* of the end of each *Quarter*, the *AER* must prepare a report for the previous *Quarter* and make it available on request to all *Registered Participants* and to those *participating jurisdictions* that participated in the *market* during the *Quarter* covered by the report. The report must include:

- (a) a summary of the acts or omission of the *Smelter Trader* constituting non-compliance with any requirement of the *Rules*, as disclosed in written notices received by the *AER* under clause 9.4.3 during the *Quarter* covered by the report; and

- (b) an assessment by the *AER* of the effect that those acts or omissions have had on the efficient operation of the *market* during the *Quarter* covered by the report.

9.4.5 Cross Border Networks

- (a) If:
 - (1) the *Victorian Minister* considers that a *transmission network* or *distribution network* situated in Victoria is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and
 - (2) the *Minister* for that other *participating jurisdiction* consents,then the *Victorian Minister* and the *Minister* for that other *participating jurisdiction* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.
- (b) If a nomination is made under clause 9.4.5(a), then the *jurisdictional derogations* for Victoria do not apply to the extended part of the relevant *network* which is situated in Victoria.
- (c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for Victoria should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the *Victorian Minister* consents, the *jurisdictional derogations* for Victoria are also to apply to that part of the *network* situated in the other *participating jurisdiction*.

9.5 [Deleted]

9.6 Transitional Arrangements for Chapter 4 - System Security

9.6.1 Operating Procedures (clause 4.10.1)

- (a) For the purposes of clause 4.10.1(b), the System Operating Procedures as defined in the *System Code* as at 13 December 1998 (with the necessary changes to be made by *VENCorp*) are the *regional specific power system operating procedures* that apply from that date in respect of the *Victorian Transmission Network*.
- (b) This clause is not to be taken as limiting in any way the operation of any other provision of the *Rules* relating to the review, updating and amendment of the *regional specific power system operating procedures*.

9.6.2 Nomenclature Standards (clause 4.12)

For the purposes of clause 4.12, the Nomenclature Standards as defined in the *System Code* as at 13 December 1998 are taken to be the *nomenclature standards* agreed between a *Network Service Provider* in respect of the *Victorian Transmission Network* or a *Victorian Distribution Network* and *NEMMCO* until *NEMMCO* and the relevant *Network Service Provider* agree otherwise under clause 4.12(a) or *NEMMCO* determines otherwise under clause 4.12(a).

9.7 Transitional Arrangements for Chapter 5 - Network Connection

9.7.1 [Deleted]

9.7.2 Application for Connection

- (a) This clause applies in respect of a *transmission network* (including a part of a *transmission network*) situated in Victoria in respect of which *VENCorp* and one or more other persons that hold a *transmission licence* is a *Network Service Provider*. In this clause, such a person (not *VENCorp*) is called a “*Connection Service Provider*”.
- (b) The requirements of Chapter 5 in relation to access to, *connection* to, *augmentation* of, the modification of a *connection* to, the provision of *network services* or *transmission use of system services*, or a modification to the provision of *network services* or *transmission use of system services*, in respect of, a *transmission network* to which this clause applies are subject to this clause 9.7.2.
- (c) If a *Connection Service Provider* receives a *connection* enquiry or an *application to connect* in respect of a *transmission network* to which this clause applies and the *connection* enquiry or *application to connect* relates in whole or part to the provision of *network services* or *transmission use of system services*, or a modification to the provision of *network services* or *transmission use of system services*, in respect of, a *transmission network* to which this clause applies, then the *Connection Service Provider* must give *VENCorp* the information provided by the person making the enquiry or the application under Chapter 5 in relation to the enquiry or application.
- (d) For the purposes of determining under clause 5.3.2(e) whether *VENCorp* or a *Connection Service Provider* is the *Network Service Provider* that should process and respond to a *connection* enquiry and provide the information required under clauses 5.3.3(b)(3) and 5.3.3(b)(4) in response to a *connection* enquiry in relation to a *transmission network* to which this clause applies, regard must be had to the following:
 - (1) *VENCorp* is the *Network Service Provider* in respect of those aspects of the *application* that relate to the provision of *network services* or *transmission use of system services*; and

- (2) the relevant *Connection Service Provider* is the *Network Service Provider* in respect of the provision of *connection services*.
- (e) For the purposes of the following provisions of the *Rules*:
 - (1) responses to a *connection* enquiry under clause 5.3.3;
 - (2) provision of information about *connection* requirements under clause 5.3.4(b);
 - (3) an offer to *connect* under clauses 5.3.5 and 5.3.6;
 - (4) the terms of a *connection agreement* under clause 5.3.7; and
 - (5) the requirement to enter into a *connection agreement* under clause 5.3.7(a);

the *Network Service Provider* in respect of a *transmission network* to which this clause applies is:

- (6) *VENCorp*, in respect of the provision of *network services* or *transmission use of system services*; and
- (7) the relevant *Connection Service Provider*, in respect of the provision of *connection services*.

9.7.3 [Deleted]

9.7.4 Regulation of Distribution Network Connection

- (a) In this clause:

appropriate regulator means:

- (1) if there has been no transfer of regulatory responsibility to the *AER* under a law of Victoria – the *ESC*;
- (2) if there has been a transfer of regulatory responsibility to the *AER* under a law of Victoria – the *AER*.

- (b) This clause 9.7.4:

- (1) applies in respect of the regulation of access to, *connection* to, the modification of a *connection* to, the *augmentation* of, the provision of *network services* or *distribution use of system services*, and the modification of the provision of *network services* or *distribution use of system services*, in respect of, a *distribution network* (including any part of a *distribution network*) situated in Victoria; and

- (2) expires on the date fixed under the *National Electricity (Victoria) Act 2005* as the Victorian distribution pricing determination end date.

Note:

The date is 31 December 2010 or a later date fixed in a Victorian distribution pricing determination as the date on which the determination will cease to have effect.

- (c) Notwithstanding anything to the contrary in the *Rules*, the appropriate regulator is responsible for the regulation of access to, *connection* to, the modification of a *connection* to, the *augmentation* of, the provision of *network services* and *distribution use of system services*, and the modification of the provision of *network services* and *distribution use of system services*, in respect of, any *distribution network* to which this clause applies.
- (d) For the purposes of clause 5.3.6(c), any question as to the fairness and reasonableness of an offer to *connect* in relation to a *distribution network* to which this clause applies is to be decided by the appropriate regulator on the basis of the appropriate regulator's opinion of the fairness and reasonableness of the offer.
- (e) If a dispute arises in relation to any of access to, *connection* to, the modification of a *connection* to, the *augmentation* of, the provision of *network services* or *distribution use of system services*, or the modification of the provision of *network services* or *distribution use of system services*, in respect of, any *distribution network* to which this clause applies, then that dispute must be resolved in accordance with procedures specified by the appropriate regulator and clause 8.2 does not apply to that dispute.

9.7.5 [Deleted]

9.7.6 [Deleted]

9.7.7 [Deleted]

9.8 Transitional Arrangements for Chapter 6 - Network Pricing

9.8.1 [Deleted]

9.8.2 [Deleted]

9.8.3 [Deleted]

9.8.4 Transmission Network Pricing

(a) Notwithstanding Chapter 6A, in determining *transmission service* pricing and revenues in respect of the *Victorian Transmission Network* or a part of the *Victorian Transmission Network*, the AER must:

- (1) [Deleted]
- (2) apply, as the case requires and subject to clauses 9.8.4A to 9.8.4F, Parts A – H of Chapter 6A; and
- (3) ensure that each *Distributor* has the benefit or burden of an equalisation adjustment for each *financial year* equal to the amount of the adjustment specified for that *Distributor* in the column headed “Equalisation Adjustment” in the following table:

TABLE	
Business	Equalisation Adjustment (\$'000) Note 2)
TXU Electricity Ltd	(4,939)
Powercor Australia Ltd	(19,011)
AGL Electricity Limited	5,171
CitiPower Pty Ltd	5,920
United Energy Ltd	12,859

multiplied by the relevant factor determined in accordance with the following table:

TABLE	
If the <i>financial year</i> falls within the period:	then the relevant factor is:
1 July 2001 - 30 June 2005	.80
1 July 2005 - 30 June 2010	.60
1 July 2010 - 30 June 2015	.40
1 July 2015 - 30 June 2020	.20
thereafter	0

(b) [Deleted]

9.8.4A Modification of Chapter 6A in its application to Victoria

The application of Chapter 6A in respect of the *Victorian Transmission Network* or a part of the *Victorian Transmission Network* is subject to the modifications set out in clauses 9.8.4B to 9.8.4F.

9.8.4B Transmission service revenues

(a) Despite anything to the contrary in Chapter 6A or in this Chapter 9, the applicable *transmission* revenue regulatory regime for the regulation of *transmission service* revenues in respect of the *Victorian Transmission Network* or a part of the *Victorian Transmission Network* is:

- (1) in relation to any *transmission services* provided by a *Regulated owner*, the *transmission* revenue regulatory regime set out in Chapter 6A and, for that purpose, every reference in Chapter 6A to a *Transmission Network Service Provider* is to be read as a reference to a *Regulated owner*; and
- (2) in relation to any *transmission services* provided by *VENCorp*, the *transmission* revenue regulatory regime set out in Chapter 6A as modified by clauses 9.8.4B to 9.8.4E, and for that purpose every reference in Chapter 6A to:
 - (i) a *Transmission Network Service Provider* is to be read as a reference to *VENCorp*;
 - (ii) the *maximum allowed revenue* for a *Transmission Network Service Provider* for a *regulatory year* of a *regulatory control period* is to be read as a reference to the *maximum allowable aggregate revenue*;

- (iii) a *regulatory control period* is to be read as a reference to a *relevant regulatory period*; and
 - (iv) *prescribed transmission services* is to be read as a reference to services in respect of which *VENCorp* may determine *shared transmission network use charges*.
- (b) In clause 9.8.4B(a)(1), *transmission services* includes *shared network services*.

9.8.4C Transmission revenue regulatory regime for transmission services provided by VENCORP

- (a) The *transmission* revenue regulatory regime that applies to *VENCorp* must comply with the following principles:
- (1) the amount of *VENCorp's maximum allowable aggregate revenue* for a *relevant regulatory period* must not exceed *VENCorp's statutory electricity transmission-related costs*; and
 - (2) *VENCorp's maximum allowable aggregate revenue* must be determined on a full cost recovery but no operating surplus basis.
- (a1) For the avoidance of doubt, *transmission services* offered by *VenCorp* are not taken to be offered on a contestable basis by reason only of *VENCorp* having procured those services through a competitive tender or similar process.
- (a2) The procedure set out paragraphs (b)-(g4) applies in relation to *transmission services* provided by *VenCorp* and Part E of Chapter 6A is modified in so far as it applies to the regulation of revenues.
- (b) Not less than 7 months before the commencement of a *relevant regulatory period*, *VENCorp* must, for the purpose of enabling the *AER* to determine *VENCorp's maximum allowable aggregate revenue* for a *relevant regulatory period*, submit its revenue application for that *relevant regulatory period* to the *AER* that sets out:
- (1) its proposed *maximum allowable aggregate revenue* for each *financial year* in that *relevant regulatory period*;
 - (2) its forecast *statutory electricity transmission-related costs* for each *financial year* in that *relevant regulatory period*; and
 - (3) **[Deleted]**

- (4) a statement reconciling its most recent forecast of:
 - (i) the revenue that will be recovered by way of *shared transmission network use charges*; and
 - (ii) the *statutory electricity transmission-related costs*,
for the *relevant regulatory period* immediately preceding the *relevant regulatory period* to which the application relates.
- (c) The application must be:
 - (1) consistent with the principles set out in clause 9.8.4C(a); and
 - (2) in a form that meets the *Information requirements guidelines* but only to the extent to which those guidelines are relevant and applicable to *VENCorp*.
- (d) Subject to clause 9.8.4C(e), (f), (g), (g3) and (g4), the *AER* must determine *VENCorp's maximum allowable aggregate revenue* for a *relevant regulatory period*.
- (e) A determination under clause 9.8.4C(d):
 - (1) must apply the principles set out in clause 9.8.4C(a);
 - (2) must comply with the requirements set out in clause 6A.14.2, modified as necessary to apply to the revenue regulatory regime under this clause 9.8.4C;
 - (3) must take into account:
 - (i) *VENCorp's* functions under the *EI Act*, the application of the *Rules* to *VENCorp* and the conditions imposed on *VENCorp* under its *transmission licence*; and
 - (ii) **[Deleted]**
 - (iii) the difference (if any) between the forecasts referred to in clause 9.8.4C(b)(4); and
 - (4) must set out the *maximum allowable aggregate revenue* for each *financial year* in that *relevant regulatory period*.
- (f) If, after considering the application, the *AER* finds that there is a difference of the kind referred to in clause 9.8.4C(e)(3)(iii), the *AER* must apply that difference in any determination it makes under clause 9.8.4C(d).

- (g) If the *AER* does not make a determination under clause 9.8.4C(d) before the commencement of the *relevant regulatory period* in respect of which the application was made, the *AER* is to be taken to have made a determination as to *VENCorp's maximum allowable aggregate revenue* in respect of each *financial year* in that *relevant regulatory period* on the same terms as the application.
- (g1) If, at any time during a *relevant regulatory period*, a *Regulated owner* proposes to send a notice to the *AER* which could have the effect (directly or indirectly) of varying a charge, or introducing a new charge, payable by *VENCorp* to the *Regulated owner* during that *relevant regulatory period* for *shared network services*, the *Regulated owner* must first provide a copy of that notice to *VENCorp*.
- (g2) If *VENCorp's statutory electricity transmission-related costs* for a *financial year* have exceeded, or *VENCorp* anticipates (as a result of receiving a notice from a *Regulated owner* under clause 9.8.4C(g1) or otherwise) that they will exceed, the amount of the *statutory electricity transmission-related costs* for that *financial year* assumed by the *AER* in making the determination of *VENCorp's maximum allowable aggregate revenue*, *VENCorp* may apply to the *AER* for an adjustment to the *maximum allowable aggregate revenue* for each affected *financial year* in the *relevant regulatory period* of an amount, set out in the application, equal to the amount required to ensure that the *maximum allowable aggregate revenue* complies with the principles in clause 9.8.4C(a).
- (g3) Following an application by *VENCorp* under clause 9.8.4C(g2), the *AER* must determine the amount, if any, by which *VENCorp's maximum allowable aggregate revenue* for each affected *financial year* in the *relevant regulatory period* is to be adjusted so that it complies with the principles in clause 9.8.4C(a).
- (g4) If the *AER* does not make a determination under clause 9.8.4C(g3) within 30 *business days* after the application by *VENCorp* under clause 9.8.4C(g2), the *AER* is to be taken to have made a determination that *VENCorp's maximum allowable aggregate revenue* for each affected *financial year* in the *relevant regulatory period* is to be adjusted by the amount set out in *VENCorp's* application.
- (h) **[Deleted]**

9.8.4D Information disclosure by VENCorp

VENCorp must comply with Part F of Chapter 6A, but only to the extent to which it is relevant and applicable to *VENCorp*.

9.8.4E [Deleted]

9.8.4F Pricing for connection to and use of Victorian transmission network

- (a) The operation of Part J of Chapter 6A, as it operates in respect the *Victorian Transmission Network* or a part of the *Victorian Transmission Network*, is modified by this clause 9.8.4F so that the allocation of the *aggregate annual revenue requirement* and its equivalent determined under clause 9.8.4C, and the allocation of transmission costs and the conversion of those allocated *transmission costs* to *prescribed transmission service* prices and charges as provided for under Part J of Chapter 6A, reflects the arrangements in place in relation to the *Victorian Transmission Network* or a part of the *Victorian Transmission Network* under the *EI Act*, the *ESC Act* and the *Tariff Order*.
- (b) **[Deleted]**
- (c) Part J of Chapter 6A applies in respect of the *Victorian Transmission Network* or a part of the *Victorian Transmission Network* in the following manner:
- (1) references to *prescribed transmission services* are to be read (as applicable) as including *shared network services*;
 - (2) subject to clauses 9.8.4F(d), (f) and (h) (as the case requires), applies to:
 - (i) where a provision relates to the provision of *prescribed TUOS services* or *prescribed transmission common services*, a *Regulated owner* and *VENCorp* and, for that purpose, references in Part J to:
 - (A) a *Transmission Network Service Provider* are to be read as a reference to the *Regulated owner* or *VENCorp* (as the case requires); and
 - (B) *prescribed TUOS services* or *prescribed common transmission services* are to be read as, in the case of a *Regulated owner*, a reference to *shared network services*; and
 - (C) the *aggregate annual revenue requirement* are to be read as, in the case of *VENCorp*, a reference to the *maximum allowable aggregate revenue* for the relevant *financial year*;
 - (ii) where a provision of Part J of Chapter 6A relates to the provision of *prescribed entry services* or *prescribed exit services*, a *Regulated owner* and, for that purpose, every

reference in that provision to a *Transmission Network Service Provider* is to be read as a reference to the *Regulated owner*;

- (3) rules 6A.27-6A.28 apply to:
- (i) where a provision of any of these rules relates to the provision of *prescribed entry services* or *prescribed exit services*, a *Regulated owner* and, for that purpose, every reference in that provision to a *Transmission Network Service Provider* is to be read as a reference to the *Regulated owner*;
 - (ii) where a provision of any of these clauses relates to the provision of *prescribed TUOS services* or *prescribed common transmission services*, *VENCorp* and, for that purpose, every reference in that provision to a *Transmission Network Service Provider* is to be read as a reference to *VENCorp*.
- (d) A *Regulated owner* must, on allocating its *aggregate annual revenue requirement* amongst all of its assets utilised in the provision of *shared network services*, immediately notify *VENCorp* of the actual amount of the *aggregate annual revenue requirement* allocated in respect of each of its assets utilised in the provision of those services.
- (e) In addition to the modifications set out in clause 9.8.4F(c)(3), clause 6A.23.4 applies to a *Regulated owner* as if:
- (1) there were substituted: “(3) *shared network services* cost” for the words in clause 6A.23.4(b)(3)-(5); and
 - (2) there were inserted in clause 6A.23.4, the following words:

“The portion of the *aggregate annual revenue requirement* referable to *shared network services* is recoverable by a *Regulated owner* from *VENCorp*.”
- (f) *VENCorp* is to be taken to be:
- (1) the *Co-ordinating Network Service Provider* appointed under rule 6A.29 responsible for the allocation of all relevant *aggregate annual revenue requirements* relating to the provision of *transmission services* which are *transmission use of system services* or *common services* within the *Victorian region* in accordance with the relevant clauses of Part J of Chapter 6A; and
 - (2) the *Transmission Network Service Provider* referred to in clause 6A.29.2 which must liaise with *Network Service Providers* in other *interconnected regions* which are similarly responsible for the allocation of all relevant *aggregate annual revenue requirements*

relating to the provision of *transmission services* which are *transmission use of system services* or *common services*.

- (g) **[Deleted]**
- (h) *VENCorp* must, in allocating the portion of its *shared transmission network use charges* that is to be recovered from each *Distributor* to which it provides *prescribed TUOS services* and *prescribed transmission common services* in each *financial year* of a *relevant regulatory period*, adjust that portion in accordance with clause 9.8.4(a)(3).

9.8.4G Transitional provisions

Despite anything to the contrary in clauses 9.8.4A to 9.8.4D, any determination of the *ACCC* setting *VENCorp's revenue cap* that is in force immediately before 1 January 2003 is deemed to be a determination of the *AER* under clause 9.8.4C(d), and for that purpose, clauses 9.8.4A to 9.8.4D and the provisions of Part B of Chapter 6 as modified by clauses 9.8.4A to 9.8.4D, apply accordingly.

9.8.5 Distribution Network Pricing – Victorian Jurisdictional Regulator

- (a) The *ESC* remains as the *Jurisdictional Regulator* for Victoria until a transfer of regulatory responsibility is made to the *AER* under a law of Victoria.
- (b) This clause expires on 1 January 2011.

9.8.6 [Deleted]

9.8.7 Distribution network pricing – transitional application of former Chapter 6

- (a) Subject to this clause, the former Chapter 6 continues to apply in relation to Victorian distribution networks during the transitional period.
- (b) The appropriate regulator has the powers and functions of the *Jurisdictional Regulator* under the former Chapter 6 as if appointed for Victoria as the *Jurisdictional Regulator* for the purposes of clause 6.2.1(b) of the former Chapter 6.
- (c) The following apply only to the extent they are consistent with clause 2.1 of the *Tariff Order*:
 - (1) national guidelines for *distribution service* pricing (so far as applicable to Victorian distribution networks) formulated under clause 6.2.1(c) of the former Chapter 6;
 - (2) guidelines and rules formulated for Victoria under clause 6.2.1(f) of the former Chapter 6,

- (d) The arrangements outlined in Parts D and E of the former Chapter 6 must also be applied by the appropriate regulator subject to clause 2.1 of the *Tariff Order*.
- (e) The value of sunk assets determined under clause 6.2.3(e)(5)(ii) of the former Chapter 6 must be consistent with clause 2.1 of the *Tariff Order*.
- (f) In regulating *distribution service* pricing for a Victorian distribution network:
 - (1) the appropriate regulator must specify explicit price capping as the form of economic regulation to be applied in accordance with clause 6.2.5(b) of the former Chapter 6; and
 - (2) the appropriate regulator must comply with clause 2.1 of the *Tariff Order*.
- (g) Neither this clause, nor the provisions of former Chapter 6 as continued in force by this clause, are relevant to a distribution determination that is to have effect after the end of the transitional period.
- (h) In this clause:

appropriate regulator means:

- (1) if there has been no transfer of regulatory responsibility to the AER under a law of Victoria – the ESC;
- (2) if a transfer of regulatory responsibility has been made to the AER under a law of Victoria – the AER.

transitional period means the period commencing on the commencement of this clause and ending on its expiry.

Victorian distribution network means a *distribution network* situated wholly or partly in Victoria.

- (i) This clause expires on the date fixed under the *National Electricity (Victoria) Act 2005* as the Victorian distribution pricing determination end date.

Note:

The date is 31 December 2010 or a later date fixed in a Victorian distribution pricing determination as the date on which the determination will cease to have effect.

9.8.8 Exclusion of AER's power to aggregate distribution systems and parts of distribution systems

The following provisions of Chapter 6 apply to *distribution systems* situated in Victoria as if, in each case, the words “unless the AER otherwise determines” were omitted:

- (a) clause 6.2.4(c);
- (b) clause 6.2.4(d);
- (c) clause 6.8.2(e);
- (d) clause 6.8.2(f).

Note:

The effect of these modifications is to exclude the AER's power to consolidate, under the ambit of a single distribution determination, 2 or more distribution systems, or 2 or more parts of a single distribution system that had, before the commencement of Chapter 6, been separately regulated.

9.9 Transitional Arrangements for Chapter 7 - Metering

9.9.1 Metering Installations To Which This Schedule Applies

The transitional arrangements set out in this clause 9.9 apply in relation to a *metering installation* (including a *check metering installation*) in use at *market commencement* that was required to comply with, and did comply with, the *Wholesale Metering Code* at *market commencement*.

9.9.2 [Deleted]

9.9.3 [Deleted]

9.9.4 [Deleted]

9.9.5 [Deleted]

9.9.6 [Deleted]

9.9.7 [Deleted]

9.9.8 [Deleted]

9.9.9 Periodic Energy Metering (clause 7.9.3)

- (a) Subject to clause 9.9.9(b), for the purposes of clause 7.9.3, *NEMMCO*, the *Local Network Service Provider* and the *Market Participant* are taken to have agreed that the data referred to in clause 7.9.3 which is obtained from a *metering installation* to which this clause 9.9 applies may be collated in 15 minute intervals.
- (b) This clause 9.9.9 ceases to apply in respect of a *metering installation* if *NEMMCO*, the relevant *Local Network Service Provider* or the relevant *Market Participant* gives notice requiring an agreement to be reached under clause 7.9.3.

9.9.10 Use of Alternate Technologies (clause 7.13)

- (a) Subject to this clause 9.9.10, if at *market commencement* the *Wholesale Metering Code* provides for the use of alternate technologies or processes for the purpose of calculating the consumption of energy by a non-franchise customer (as defined in the *EI (RP) Act* and in force immediately before the commencement of section 39(a) of the *Electricity Industry Act 1995 (Vic)*), then the use of these technologies or processes is taken to have been agreed for the purposes of clause 7.13(a) but only to the extent to which the alternate technology or process was in use at *market commencement* in relation to that non-franchise customer.
- (b) *NEMMCO*, the relevant *Local Network Service Provider* or the relevant *Market Participant* may give notice requiring agreement to be reached under clause 7.13(a) in respect of a technology or process referred to in clause 9.9.10(a) and clause 9.9.10(a) ceases to apply to that technology or process from the date specified in the notice.

9.9A [Deleted]

Schedule 9A1.1 – [Deleted]

Schedule 9A1.2 – [Deleted]

Schedule 9A1.3 – [Deleted]

Schedule 9A2 – [Deleted]

Schedule 9A3 – Jurisdictional Derogations Granted to Generators

1. Interpretation of tables

In this schedule 9A3:

- (a) a reference to a *Generator* listed in a table is a reference to a *Generator* listed in column 1 of the relevant table;
- (b) a reference to a *generating unit* listed in a table in relation to a *Generator* is a reference to each *generating unit* listed opposite the *Generator* in the relevant table;
- (c) a reference to a *Network Service Provider* in relation to a *generating unit* or a *Generator* listed in a table is to be taken to be:
 - (1) in the case of a *generating unit connected to a transmission network*, a reference to *VENCorp*; and
 - (2) in the case of a *generating unit connected to a distribution network*, a reference to the person that is the *Network Service Provider* in relation to that *distribution network*; and
- (d) a reference to a modification or variation of the *Rules* or an item taken to have been agreed for the purposes of the *Rules* listed in a table applies in respect of each *generating unit* listed opposite that modification, variation or agreed item in the table.

2. Continuing effect

In this schedule 9A3, a reference to:

- (a) a particular *Generator* in relation to a *generating unit*; or
- (b) a particular *Network Service Provider* in relation to a *Generator*,

at any time after the 13 December 1998 is to be taken as a reference to the person or persons who is or are (or who is or are deemed to be) from time to time registered with *NEMMCO* as the *Generator* in respect of that *generating unit* for the purposes of the *Rules* or the *Network Service Provider* from time to time in respect of the *transmission network* or *distribution network* to which the *generating unit* is connected.

3. Subsequent agreement

Where, under a provision of this schedule 9A3, a particular matter is taken to have been agreed for the purposes of schedule 5.2 of the *Rules* in relation to a *generating unit*, then that provision ceases to apply in respect of that *generating*

unit if all the parties required to reach agreement in relation to that matter under the *Rules* so agree expressly in writing.

4. Additional services that may be required (clause S5.2.2 of schedule 5.2)

4.1 A *Generator* listed in Table 1 is taken to have been required by the relevant *Network Service Provider* to provide *power system stabilising facilities* for the *generating units* listed in Table 1.

4.2 Clause 4.1 ceases to apply in respect of a *generating unit* if the relevant *Generator*, *NEMMCO* and the relevant *Network Service Provider* so agree expressly in writing.

Table 1:

Generator	Generating Units
Generation Victoria	Jeeralang Power Station A, Units 1 to 4
Generation Victoria	Jeeralang Power Station B, Units 1 to 3

5. Reactive Power Capability (clause S5.2.5.1 of schedule 5.2)

Clause S5.2.5.1 of schedule 5.2 of the *Rules* is replaced for a *Generator* listed in Table 2 in respect of those *generating units* listed in column 2 of Table 2 by the following:

For the purpose of this clause S5.2.5.1:

'*rated active power output*' means the 'Rated MW (Generated)' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*; and

'*nominal terminal voltage*' means the 'Nominal Terminal Voltage' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*.

- (a) Each of the *synchronous generating units*, while operating at any level of *active power* output, must be capable of:
- (1) supplying at its terminals an amount of *reactive power* of at least the amount that would be supplied if the *generating unit* operated at *rated active power output*, *nominal terminal voltage* and a lagging power factor of 0.9; and
 - (2) absorbing at its terminals an amount of *reactive power* of at least the amount that would be absorbed if the *generating unit* operated at *rated*

active power output, nominal terminal voltage and a leading power factor set out in respect of that *generating unit* in column 3 of Table 2.

- (b) In the event that any of the relevant power factors referred to in paragraph (a) above cannot be provided in respect of a *generating unit*, the relevant *Generator* must reach a commercial arrangement under its *connection agreement* with the relevant *Network Service Provider*, or with another *Registered Participant*, for the supply of the deficit in *reactive power* as measured at that *generating unit's* terminals.

Table 2:

Generator	Generating Units	Leading Power Factor
Loy Yang Power Ltd	Loy Yang Power Station A Units 1, 3 and 4	0.944
Loy Yang Power Ltd	Loy Yang Power Station A Unit 2	0.952
Yallourn Power Ltd	Yallourn Power Station W Units 1 and 2	0.954
Yallourn Power Ltd	Yallourn Power Station W Units 3 and 4	0.941
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8	0.989
Smelter Trader	Anglesea Power Station Unit 1	0.991
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Unit 1	(-)
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 2, 3 and 4	(-)
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Unit 5	0.979
Generation Victoria	Jeeralang A Power Station Units 1 to 4	0.978
Southern Hydro Ltd	Dartmouth Power Station Unit 1	0.972
Edison Mission Energy	Loy Yang B Power Station	0.941

Australia Limited	Units 1 and 2	
-------------------	---------------	--

6. Generating unit response to disturbances (clauses S5.2.5.3, S5.2.5.4 and S5.2.5.5 of schedule 5.2)

- 6.1 A *Generator* listed in Table 3.1 is, in respect of a *generating unit* listed in column 2 of Table 3.1, taken to comply with the requirements of clause S5.2.5.3, S5.2.5.4 and S5.2.5.5 of schedule 5.2 of the *Rules* if the *generating unit* complies with clause 6.3 below.
- 6.2 A *Generator* listed in Table 3.2 is, in respect of a *generating unit* listed in column 2 of Table 3.2, taken to comply with the requirements of clause S5.2.5.3, S5.2.5.4 and S5.2.5.5 of schedule 5.2 of the *Rules* if the *generating unit* complies with clause 6.4 below.
- 6.3 The *generating unit* must be able to maintain continuous uninterrupted operation in the event of:
- (a) *disconnection* of the single largest *generating unit* on the *power system* provided that system *frequency* does not fall below 49.5 Hz and recovers to above 49.9 Hz within four minutes; and
 - (b) a two-phase to ground line fault adjacent to the power station switch yard cleared in primary protection time.
- 6.4 The *generating unit* must be able to maintain continuous uninterrupted operation in the event of *disconnection* of the single largest *generating unit* on the *power system* provided that system *frequency* does not fall below 49.5 Hz and recovers to above 49.9 Hz within four minutes.

Table 3.1:

Generator	Generating Units
Loy Yang Power Ltd	Loy Yang A Power Station Units 1 to 4
Generation Victoria	Newport D Power Station Unit 1

Table 3.2:

Generator	Generating Units
Yallourn Energy Ltd	Yallourn W Power Station Units 1 to 4
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 1 to 5

Generation Victoria	Jeeralang A Power Station Units 1 to 4
Generation Victoria	Jeeralang B Power Station Units 1 to 3
Southern Hydro Ltd	Dartmouth Power Station Unit 1 Eildon Power Station Units 1 and 2 Clover Power Station Units 1 and 2 McKay Creek Power Station Units 1 to 6 West Kiewa Power Station Units 1 to 4
Edison Mission Energy Australia Limited	Loy Yang B Power Station Units 1 and 2

7. Partial load rejection (clause S5.2.5.7 of schedule 5.2)

7.1 For a *Generator* listed in Table 4.1, in respect of those *generating units* listed in column 2 of Table 4.1, clause S5.2.5.7(c) of schedule 5.2 of the *Rules* is modified by the addition of the following after “*nameplate rating*”:

“and system *frequency* remains within 47 Hz to 52 Hz provided that system *frequency* returns to:

- (i) within the range 48.5 Hz to 50.5 Hz within 60 seconds; and
- (ii) within the range 49.5 Hz to 50.5 Hz within 60 minutes,”

Table 4.1:

Power Station	Generating Units
Loy Yang Power Ltd	Loy Yang A Power Station Units 1 to 4
Generation Victoria	Newport D Power Station Unit 1
Yallourn Energy Ltd	Yallourn W Power Station Units 1 to 4
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 1 to 5
Generation Victoria	Jeeralang A Power Station Units 1 to 4 Jeeralang B Power Station Units 1 to 3

Edison Mission Energy Australia Limited	Loy Yang B Power Station Units 1 and 2
-----------------------------------------	----------------------------------------

7.2 For a *Generator* listed in Table 4.2, the application of clause S5.2.5.4(a) of schedule 5.2 of the *Rules* to those *generating units* listed in column 2 of Table 4.2 is varied by replacing “30%” with “25%”.

Table 4.2

Generator	Generating Units
Loy Yang Power Ltd	Loy Yang A Power Station Units 1 to 4
Yallourn Energy Ltd	Yallourn W Power Station Units 1 to 4
Hazelwood Power Corporation	Hazelwood Power Station Units 1 to 8
Energy Brix Australia Corporation	Morwell Power Station Units 1 to 5
Edison Mission Energy Australia Limited	Loy Yang B Power Station Units 1 and 2

7.3 For a *Generator* listed in Table 4.3, in respect of a *generating units* listed in column 2 of Table 4.3, clause S5.2.5.4(a) of schedule 5.2 of the *Rules* is modified by the addition of the following after “*nameplate rating*”: “and allowing that the *generating unit's* output may be manually adjusted to avoid rough running bands following automatic control action”.

Table 4.3:

Generator	Generating Units
Southern Hydro Ltd	Dartmouth Power Station Unit 1 Eildon Power Station Units 1 and 2 Clover Power Station Units 1 and 2 West Kiewa Power Station Units 1 to 4

8. [Deleted]

9. [Deleted]

10. **Protection systems that impact on system security (clause S5.2.5.9 of schedule 5.2)**

For the purposes of clause S5.2.5.9 of schedule 5.2 of the *Rules*, in the case of a *Generator* listed in Table 7, in respect of those *generating units* listed in column 2 of Table 7:

- (a) the relevant *Network Service Provider* is taken to have agreed that the *Generator* is to provide protections for those *generating units* to perform the following functions except where indicated otherwise in column 3 of Table 7:
 - (1) protection for faults on the line and connections to the unit transformer of the *generating unit* and *transmission network* or *distribution network* (as the case may be);
 - (2) protection for faults within the generator transformer of the *generating unit*;
 - (3) protection for faults within the *generating unit*;
 - (4) protection for excitation system faults;
 - (5) protection for faults in the phase isolated bus or its terminations between the *generating unit* and the generator transformer of the *generating unit*; and
 - (6) protection for faults within the generator transformer of the *generating unit*;
- (b) where indicated in column 3 of Table 7, the protection system is not required to be duplicated; and
- (c) the *Generator* must ensure that only settings approved by the relevant *Network Service Provider* in writing are applied on the *protection systems* of the *generating unit* and must not change any of those settings without the prior written approval of the relevant *Network Service Provider*.

Table 7:

Power Station	Generating Units	Derogations
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8	Not required to duplicate protections for excitation system faults.
Generation	Jeeralang A Power	Not required to duplicate protections

Victoria	Station Units 1 to 4	for faults in the unit transformers of the <i>generating unit</i> .
Generation Victoria	Jeeralang B Power Station Units 1 to 3	Not required to duplicate protection for excitation system faults or for faults in the unit transformers of the <i>generating unit</i> .
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 1 to 5	Not required to duplicate any protections. Not required to provide protection for faults within transformers (and connections thereto) which do not form part of the power station.

Power Station	Generating Units	Derogations
Southern Hydro Ltd	Eildon Power Station Units 1 and 2	Not required to duplicate protections for faults within the unit transformers of the <i>generating unit</i> .
Southern Hydro Ltd	Clover Power Station Units 1 and 2	Not required to duplicate any of the protections.

11. Asynchronous operation (clause S5.2.5.10 of schedule 5.2)

A *Generator* listed in Table 8 is not required to have protection to prevent pole slipping or asynchronous operation in respect of those *generating units* listed in column 2 of Table 8.

Table 8:

Generator	Generation units
Southern Hydro Ltd	Clover Power Station Units 1 and 2

12. [Deleted]

13. Governor Systems (load control) (clause S5.2.5.11 of schedule 5.2)

For the purposes of clause S5.2.5.11 of schedule 5.2 of the *Rules*, a *Generator* listed in Table 10 is not required to include *facilities* for *load* control for those *generating units* listed in column 2 of Table 10.

Table 10:

Generator	Generating Unit
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8
Smelter Trader	Anglesea Power Station Unit 1

14. Governor control equipment (clause S5.2.5.11 of schedule 5.2)

14.1 For the purposes of clause S5.2.5.11 of schedule 5.2 of the *Rules*, a *Generator* listed in Tables 11.1 to 11.4 is taken to have agreed the overall response requirements set out in clause 14.2 below with the relevant *Network Service Provider* in respect of those *generating units* listed in column 2 of Tables 11.1 to 11.4.

14.2 For a *Generator* listed in Tables 11.2 to 11.4, the overall response of a *generating unit* listed in the relevant Table to system *frequency* excursions must achieve an increase in the *generating unit's* generated output of 5% for a 0.1 Hz reduction in system *frequency* and a reduction in the *generating unit's* generated output of 5% for a 0.1 Hz increase in system *frequency*, subject to the following:

- (a) for those *generating units* listed in Table 11.1, this clause only applies when operating in speed control mode;
- (b) for those *generating units* listed in Table 11.2, the *generating unit* is only required to achieve a change in the *generating unit's* generated output in accordance with the requirements of British Standard BS EN 60045-1: 1993 with a droop setting of 4%;
- (c) for those *generating units* listed in Table 11.3, the *generating unit* is only required to achieve a change in the *generating unit's* generated output in accordance with the requirements of the relevant British Standard for governors for hydro-electric generating units with an overall droop setting of 4% and a deadband of not more than 0.1 Hz; and
- (d) for those *generating units* listed in Table 11.4, the requirements of this clause are subject to requirements for steam pressure control for briquette plant operation.

Table 11.1:

Generator	Generating Unit
Generation Victoria	Jeeralang A Power Station Units 1 to 4
Generation Victoria	Jeeralang B Power Station Units 1 to 3

Table 11.2:

Generator	Generating Unit
Yallourn Energy Ltd	Yallourn W Power Station Units 1 to 4
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 1 to 4

Table 11.3:

Generator	Generating Unit
------------------	------------------------

Southern Hydro Ltd	Eildon Power Station Units 1 and 2 McKay Power Station Units 1 to 6 West Kiewa Power Stations Units 1 to 4
Southern Hydro Ltd	Clover Power Station Units 1 and 2

Table 11.4:

Generator	Generating Unit
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 2 to 4

15. Reactive current compensation (clause S5.2.5.13 schedule 5.2)

For the purposes of clause S5.2.5.13(b)(3)(x) of schedule 5.2 of the *Rules*, a *Generator* listed in Table 12 is taken to have agreed with the relevant *Network Service Provider* that in respect of those *generating units* listed in column 2 of Table 12, the *excitation control system* of the *generating unit* need not be capable of providing reactive current compensation settable for boost or droop.

Table 12:

Generator	Generating Units
Yallourn Power Ltd	Yallourn Power Station W Units 1 to 4

16. Excitation Control System (clause S5.2.5.13 of schedule 5.2)

For the purposes of clause S5.2.5.13(b) of schedule 5.2 of the *Rules*, a *Generator* listed in Table 13 is not required to provide *power system* stabilising action in relation to those *generating units* listed in column 2 of Table 13.

Table 13:

Power Station	Generating Units
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 1 to 5
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8
Smelter Trader	Anglesea Power Station Unit 1

Part B – Jurisdictional Derogations for New South Wales

9.10 [Deleted]

9.11 Definitions

9.11.1 Definitions used in this Part B

For the purposes of this Part B:

- (a) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and
- (b) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
EnergyAustralia	The energy distributor known as "EnergyAustralia" and established under the Energy Services Corporations Act 1995 (NSW).
ES Act	Electricity Supply Act 1995 (NSW).
IPART	The New South Wales Independent Pricing and Regulatory Tribunal established under the <i>IPART Act</i> .
IPART Act	Independent Pricing and Regulatory Tribunal Act 1992 (NSW).
Minister	The Minister administering the <i>ES Act</i> from time to time.
Mount Piper Cross Border Leases	The various agreements, documents and deeds relating to the leasing, ownership and operation of the <i>generating systems</i> comprising the <i>Mount Piper Power Station</i> entered into at the request of, or for the benefit of, one or more of Delta Electricity, New South Wales Treasury Corporation and the State of New South Wales and whether or not any of Delta Electricity, New South Wales Treasury Corporation or the State of New South Wales is a party to those agreements, documents and deeds.

Column 1	Column 2
Mount Piper Participants	The parties to the <i>Mount Piper Cross Border Leases</i> from time to time.
Mount Piper Power Station	The <i>power station</i> known as the “Mount Piper Power Station” located at Portland, New South Wales.
Mount Piper Trader	Delta Electricity or such other of the <i>Mount Piper Participants</i> from time to time which is operating the <i>Mount Piper Power Station</i> .
NSW Electricity Market Code	The code entitled NSW State Electricity Market Code, as in force immediately before 13 December 1998.
Power Supply Agreements	<p>Each of the following agreements in their form as at 1 July 1996:</p> <ul style="list-style-type: none"> (a) Power Supply Agreement dated 23 January 1991 between Macquarie Generation, Tomago Aluminium Company Pty Ltd and others; (b) the contract known as the BHP Port Kembla Slab and Plate Products Contract between Delta Electricity (formerly known as First State Power) and BHP Steel (AIS) Pty Ltd ACN 000 019 625 (formerly known as Australian Iron & Steel Ltd), being the contract that arises from the two agreements dated 24 May 1955, the agreement dated 27 November 1958 and the agreement dated 1 December 1969 (as amended and supplemented before 1 July 1996); (c) the contract known as the BHP Newcastle Rod and Bar Products Contract between Delta Electricity (formerly known as First State Power) and The Broken Hill Proprietary Company Ltd ACN 004 028 077, being the contract that arises from the agreement dated 13 August 1959 (as amended and supplemented before 1 July 1996).

Column 1	Column 2
Power Trader	Each of Delta Electricity (formerly known as First State Power), Macquarie Generation and such other person as may be nominated by the <i>Minister</i> to perform any obligation under a <i>Power Supply Agreement</i> .
TransGrid	The energy transmission operator known as "TransGrid" and established under the Energy Services Corporations Act 1995 (NSW).

9.12 Transitional Arrangements for Chapter 2 - Generators, Registered Participants, Registration and Cross Border Networks

9.12.1 Registration as a Generator

- (a) For the purposes of the *Rules*:
- (1) **[Deleted]**
 - (2) **[Deleted]**
 - (3) *Mount Piper Trader* is deemed to be the person that must register as a *Generator* in relation to the *generating systems* forming part of the *Mount Piper Power Station*; and
 - (4) the *Mount Piper Participants* (other than the *Mount Piper Trader*) are not to, and are not to be taken to be entitled to, and are taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating systems* forming part of the *Mount Piper Power Station*.
- (b) **[Deleted]**
- (c) Clause 9.12.1(a)(3) and (4) ceases to have effect upon the expiry or earlier termination of the last of the *Mount Piper Cross Border Leases*.

9.12.2 Customers

For the purposes of clause 2.3.1(e), and for the purposes of clause 2.4.2(b) in so far as it relates to *Customers*, a person satisfies the requirements of New South Wales for classification of a *connection point* of that person if that person is the holder of a retail supplier's licence issued under the *ES Act* or is a wholesale customer (as defined in the *ES Act*).

9.12.3 Power Traders

- (a) Each *Power Trader* for the purpose of supplying electricity under a *Power Supply Agreement* (the “*Power Supply Agreement*”) is deemed to be and at all relevant times to have been (and must register with *NEMMCO* as) a *Market Customer* in relation to electricity supplied under the *Power Supply Agreement*, which electricity is deemed to be and at all relevant times to have been a *market load*.
- (b) If complying with a requirement of the *Rules* (“the *Rules Requirement*”) would result in a *Power Trader* being in breach of a provision of a *Power Supply Agreement* to which it is a party (“the *Contractual Requirement*”), the *Power Trader* is not required to comply with the *Rules Requirement* to the extent of the inconsistency between the *Rules Requirement* and the *Contractual Requirement*.
- (c) If a *Power Trader* does not comply with a *Rules Requirement* in the circumstances described in clause 9.12.3(b), then the *Power Trader* must:
 - (1) give written notice to the *AER* of:
 - (i) the *Rules Requirement* which has not been complied with;
 - (ii) details of each act or omission which partly or wholly constitutes non-compliance with that *Rules Requirement*; and
 - (iii) details of each *Contractual Requirement* which is said by the *Power Trader* to be inconsistent with the *Rules Requirement*,by no later than *7 days* after the non-compliance with the *Rules Requirement* occurs or commences; and
 - (2) provide the *AER* with any documents or information in the possession or control of the *Power Trader* which evidence the matters referred to in clause 9.12.3(c)(1), within *14 days* (or any further period agreed to by the *AER*) of receiving a written request from the *AER*.
- (d) If:
 - (1) a *Power Trader* requires the co-operation of any other party to a *Power Supply Agreement* (a “*counterparty*”) to comply with a requirement of the *Rules* (the “*Rules Requirement*”);
 - (2) the *Power Trader* has used all reasonable endeavours to obtain the *counterparty's* co-operation in order to enable the *Power Trader* to comply with the *Rules Requirement*; and

- (3) under the *Power Supply Agreement* the *Power Trader* has no ability to require the counterparty to so co-operate with the *Power Trader* and the counterparty is not in breach of the *Power Supply Agreement* by refusing to so co-operate with the *Power Trader*,

then the *Power Trader* is not required to comply with that Rules Requirement.

- (e) If a *Power Trader* does not comply with a Rules Requirement in the circumstances described in clause 9.12.3(d), then the *Power Trader* must:

- (1) give written notice to the *AER* of:
- (i) the Rules Requirement which has not been complied with;
 - (ii) details of each act or omission which partly or wholly constitutes non-compliance with that Rules Requirement; and
 - (iii) details of the endeavours made by the *Power Trader* to obtain the counterparty's co-operation to enable the *Power Trader* to comply with the Rules Requirement,

by no later than 7 *days* after the non-compliance with the Rules Requirement occurs or commences; and

- (2) provide the *AER* with any documents or information in the possession or control of the *Power Trader* which evidence the matters referred to in clause 9.12.3(e)(1), within 14 *days* (or any further period agreed to by the *AER*) of receiving a written request from the *AER*.

- (f) To avoid any doubt, if:

- (1) after reviewing any written notice provided by a *Power Trader* under clause 9.12.3(c)(1) and any additional documents or information provided by the *Power Trader* under clause 9.12.3(c)(2), the *AER* forms the view that compliance with the relevant Rules Requirement would not have resulted in the *Power Trader* being in breach of the relevant Contractual Requirement; or
- (2) after reviewing any written notice provided by a *Power Trader* under clause 9.12.3(e)(1) (the "Notice") and any additional documents or information provided by the *Power Trader* under clause 9.12.3(e)(2), the *AER* forms the view that any of the requirements of clause 9.12.3(d) were not in fact satisfied in respect of the subject matter of the Notice,

then the matter may be dealt with by the *AER* as a breach of the *Rules*.

- (g) A *Power Trader* may provide notice and information to the *AER* as required in clauses 9.12.3(c) or (e), as the case requires, in advance if it becomes aware of the potential for the circumstances described in clauses 9.12.3(b) or (d) to arise. Such notice and information will be deemed to have been given in accordance with clauses 9.12.3(c) or (e), as the case requires.
- (h) Notwithstanding the provision of notice and information in advance in accordance with clause 9.12.3(g), the *Power Trader* must give notice of non-compliance with the *Rules* and provide such other documents or information as required in accordance with clauses 9.12.3(c) or (e), as the case requires, after such non-compliance has occurred or commenced.
- (i) If non-compliance with the *Rules* is continuing, the notice of non-compliance with the *Rules* provided under clauses 9.12.3(c) or (e), as the case requires, will be effective in relation to that non-compliance until that non-compliance ends provided that:
 - (1) the notice specifies that the non-compliance is continuing; and
 - (2) the *Power Trader* notifies the *AER* of the end of the non-compliance no later than 7 days after the non-compliance ends.
- (j) Clauses 9.12.3(b) and (d) do not affect a *Power Trader's* obligation with respect to registration with *NEMMCO* or making payments in respect of:
 - (1) *Participant fees*;
 - (2) *prudential requirements*; or
 - (3) *settlement amounts*.
- (k) Within 30 days of the end of each quarter in each calendar year, the *AER* must prepare a quarterly report for the previous quarter and make it available on request to all *Registered Participants* and to the *participating jurisdictions* which participated in the *market* during the quarter covered by the report. The quarterly report must include:
 - (1) a summary of the acts or omissions of *Power Traders* constituting non-compliance with any *Rules Requirement*, as disclosed in written notices received by the *AER* under clauses 9.12.3(c) or (e) during the quarter covered by the report; and
 - (2) an assessment by the *AER* of the effect that those acts or omissions have had on the efficient operation of the *market* during the quarter covered by the report.
- (l) This clause 9.12.3 ceases to have effect in respect of a *Power Supply Agreement* upon termination of that agreement.

9.12.4 Cross Border Networks

- (a) If:
- (1) the *Minister* considers that a *transmission network* or *distribution network* situated in New South Wales is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and
 - (2) the *Minister* for that other *participating jurisdiction* consents,
- then those *Ministers* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.
- (b) If a nomination is made under clause 9.12.4(a), then the *jurisdictional derogations* for New South Wales do not apply to the extended part of the relevant *network* which is situated in New South Wales.
- (c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for New South Wales should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the *Minister* in respect of New South Wales consents, the *jurisdictional derogations* for New South Wales are also to apply to that part of the *network* situated in the other *participating jurisdiction*.

9.13 [Deleted]

9.14 Transitional Arrangements for Chapter 4 - System Security

9.14.1 Power System Operating Procedures

For the purposes of clause 4.10.1, the *regional specific power system operating procedures* that apply in respect of operations on the *network* situated in New South Wales are, with the inclusion of any operating procedures set out in such operating manuals and other documents as are specified by *TransGrid* and provided to *NEMMCO*, the *regional specific power system operating procedures* reviewed and updated under clause 4.10.2(e).

9.15 Transitional Arrangements for Chapter 5 - Network Connection

9.15.1 [Deleted]

9.15.2 Disputes Relating to a NSW Distribution Network

- (a) If:

- (1) a dispute arises between or involving two or more *Registered Participants* in respect of:
 - (i) access to;
 - (ii) *connection* to;
 - (iii) use of; or
 - (iv) *distribution network service* pricing for,
a *distribution network* situated in New South Wales; and
- (2) **[Deleted]**
- (3) the dispute is not resolved by agreement of the parties in dispute within 10 *business days* (or such other period as the parties agree to be an acceptable period) after the dispute first arose,

then the matter in dispute must be referred by the parties in dispute to the appropriate regulator to act as the *Adviser*. If the appropriate regulator:

- (4) thinks it appropriate for a dispute; and
- (5) does not reasonably consider that acting as the *Adviser* and the *dispute resolution panel* will prejudice the appropriate regulator's ability to implement a fair and efficient dispute resolution process,

IPART may also act as the *dispute resolution panel* under the dispute resolution procedures set out in Chapter 8, provided that, if *IPART* elects to act as both the *Adviser* and the *DRP*, it must make such arrangements as are necessary to ensure that, in carrying out its functions as the *DRP*, no party may be adversely affected by *IPART* having previously acted as the *Adviser*. If *IPART* is unable or unwilling to make such arrangements, then it must appoint a *DRP* in accordance with the *Adviser's* functions in Chapter 8.

- (b) In this clause:

appropriate regulator means:

- (1) if the NSW Minister has made no transfer of regulatory responsibility to the *AER* under clause 11.14.4 – *IPART*;
- (2) if the NSW Minister has made a transfer of regulatory responsibility to the *AER* under clause 11.14.4 – the *AER*.

- (c) This clause expires on 1 July 2009.

9.16 Transitional Arrangements for Chapter 6 - Network Pricing

9.16.1 [Deleted]

9.16.2 [Deleted]

9.16.3 Jurisdictional Regulator

- (a) *IPART* remains as the *Jurisdictional Regulator* for New South Wales until the NSW Minister makes a transfer of regulatory responsibility to the *AER* under clause 11.14.4.
- (b) However, the definitions of *local area* and *Local Network Service Provider* are to be read as if the reference to the authority responsible for administering the jurisdictional electricity legislation in the relevant participating jurisdiction were replaced by a reference to the laws of the State of New South Wales.
- (c) Paragraph (a) expires on 1 July 2009.

9.16.4 Deemed Regulated Interconnector

For the purposes of the *Rules*, the *interconnector* between Armidale in New South Wales and Tarong in Queensland, to the extent that it forms part of the *power system* in New South Wales, is deemed to be a *regulated interconnector*.

9.16.5 Revenue Cap

- (a) For the purposes of clause 6.2.4, in respect of the regulation of *transmission service* pricing in New South Wales, the *revenue cap* for the *financial year* commencing on 1 July 2004 (the "Period") will be deemed to be:
- (1) for *TransGrid*, the *maximum allowed revenue* for the Period in the ACCC's "Draft Decision NSW and ACT Transmission Network Revenue Caps – TransGrid 2004/05-2008/09" dated 28 April 2004 (the "Draft TransGrid Revenue Cap Decision"); and
 - (2) for *EnergyAustralia*, the *maximum allowed revenue* for the Period in the ACCC's "Draft Decision NSW and ACT Transmission Network Revenue Cap – EnergyAustralia 2004/05-2008/09" dated 28 April 2004 (the "Draft EA Revenue Cap Decision").
- (b) For the purposes of clauses 6.3 to 6.4, 6.5.1 to 6.5.6, 6.7.3, 6.7.4 and 6.8 to 6.9, the prices applying in the Period for *prescribed transmission services* provided by means of the *transmission networks* and associated *connection assets* located in New South Wales applying to individual *transmission*

network connection points located in New South Wales during the Period, must be determined on the following basis:

- (1) the *aggregate annual revenue requirement* for *TransGrid* will be the *maximum allowed revenue* for the Period specified in the Draft *TransGrid Revenue Cap Decision*; and
 - (2) the *aggregate annual revenue requirement* for *EnergyAustralia* will be the *maximum allowed revenue* for the Period specified in the Draft *EA Revenue Cap Decision*.
- (c) For the purposes of applying clause 6.4.3C for the *financial year* commencing on 1 July 2005, *EnergyAustralia* and *TransGrid* each must subtract the *maximum allowed revenue* determined in accordance with clause 9.16.5(a) from:
- (1) in the case of *TransGrid*, the "Maximum Allowed Revenue" for the Period in any final decision which is expressed to apply to the Period; and
 - (2) in the case of *EnergyAustralia*, the "Maximum Allowed Revenue" for the Period in any final decision which is expressed to apply to the Period,

and then:

- (3) if the result of that subtraction is an amount less than zero then, in addition to the other amounts mentioned in clause 6.4.3C(b), the absolute value of that amount must be deducted from the portion of the *aggregate annual revenue requirement* referred to in clause 6.4.3C(b); and
- (4) if the result of that subtraction is an amount greater than zero then, in addition to the other amounts mentioned in clause 6.4.3C(c), that amount must be added to the portion of the *aggregate annual revenue requirement* referred to in clause 6.4.3C(c),

prior to the application of interest in accordance with clause 6.4.3C(b) or 6.4.3C(c) as the case may be.

- (d) For the purposes of clause 6.2.4, in respect of the regulation of *transmission service pricing* in New South Wales, a *revenue cap* applying to a *Transmission Network Service Provider* determined by the ACCC for the period commencing on 1 July 2004 until the end of 30 June 2009 will be deemed to be for a period of five years notwithstanding that such *revenue cap* did not take effect until after 1 July 2004 or that such *revenue cap* was determined by the ACCC after 1 July 2004.

9.17 Transitional Arrangements for Chapter 7 - Metering

9.17.1 Extent of Derogations

- (a) **[Deleted]**
- (b) **[Deleted]**
- (c) The transitional arrangements set out in clauses 9.17.2 and 9.17.4 apply to all *metering installations* (including *check metering installations*) that were in use at 13 December 1998 and that were required to comply with (and did comply with) the *NSW Electricity Market Code* as at 13 December 1998.

9.17.2 Initial Registration (clause 7.1.2)

- (a) Subject to clause 9.17.2(b), if:
 - (1) a *metering installation* to which this clause 9.17 applies was registered with *TransGrid* under the *NSW Electricity Market Code* as at 13 December 1998; and
 - (2) the details registered with *TransGrid* were provided to *NEMMCO* on or before 13 December 1998,then the *metering installation* is taken to be registered with *NEMMCO* for the purposes of clause 7.1.2(a).
- (b) The *responsible person* in respect of a *metering installation* which is taken to be registered under clause 9.17.2(a) must ensure that the requirements for registration of a *metering installation* under Chapter 7 are met by 13 December 1999 or such other time as may be agreed with *NEMMCO*.

9.17.3 Amendments to Schedule 9G1

The transitional metering provisions set out in schedule 9G1, amended as follows, apply to New South Wales in respect of Chapter 7:

- (a) **[Deleted]**
- (b) **[Deleted]**
- (c) If, in respect of a *metering installation* commissioned before 13 December 1998, the *responsible person* has obtained an exemption prior to 13 December 1998 from *TransGrid* pursuant to clause 2.2(c) of Schedule 7.2 of the *NSW Electricity Market Code*, then that exemption is deemed to continue as an exemption granted by *NEMMCO* pursuant to clause S7.2.2(c) of schedule 7.2 of the *Rules*.

(d) **[Deleted]**

(e) **[Deleted]**

(f) **[Deleted]**

9.17.4 Compliance with AS/NZ ISO 9002 (clause S7.4.3(f) of schedule 7.4)

Category 1A, 2A and 3A *Metering Providers* must be able to exhibit the requirements of clause S7.4.3(f)(1) of schedule 7.4 of the *Rules* by the date which is 2 years after the date the *Metering Provider* applied to be registered as a *Metering Provider* with NEMMCO.

9.17A [Deleted]

9.18 [Deleted]

Part C – Jurisdictional Derogations for the Australian Capital Territory

9.19 [Deleted]

9.20 Definitions and Transitional Arrangements for Cross-Border Networks

9.20.1 Definitions

For the purposes of this Part C:

- (a) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and
- (b) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
Minister	The Minister from time to time administering the Utilities Act 2000 (ACT) or other applicable ACT legislation.

9.20.2 Cross Border Networks

- (a) If:
 - (1) the *Minister* considers that a *transmission network* or *distribution network* situated in the Australian Capital Territory is a continuation of a *network* situated in New South Wales and should be considered to be a part of the New South Wales *network*; and
 - (2) the *Minister* for New South Wales consents,

then those *Ministers* may nominate that the *network* is deemed to be entirely in New South Wales and the *Rules* including any relevant *jurisdictional derogations* for New South Wales are deemed to apply to the *network* as if the *network* were located entirely within New South Wales.

- (b) If a nomination is made under clause 9.20.2(a), then the *jurisdictional derogations* for the Australian Capital Territory do not apply to the extended part of the relevant *network* which is situated in the Australian Capital Territory.
- (c) If the *Minister* for New South Wales nominates that the *jurisdictional derogations* for the Australian Capital Territory should apply to a *network* part of which is situated in New South Wales, then if the *Minister* for the Australian Capital Territory consents, the *jurisdictional derogations* for the Australian Capital Territory are also to apply to that part of the *network* situated in New South Wales.

9.21 [Deleted]

9.22 [Deleted]

9.23 Transitional Arrangements for Chapter 6 - Network Pricing

9.23.1 [Deleted]

9.23.2 [Deleted]

9.23.3 [Deleted]

9.23.4 [Deleted]

9.24 Transitional Arrangements

9.24.1 Chapter 7 - Metering

The transitional metering provisions set out in schedule 9G1 apply to the Australian Capital Territory in respect of Chapter 7.

9.24.2 [Deleted]

9.24A [Deleted]

Part D – Jurisdictional Derogations for South Australia

9.25 Definitions

9.25.1 [Deleted]

9.25.2 Definitions

(a) For the purposes of this Part D, a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the table in clause 9.25.2(b).

(b) For the purposes of this Part D, a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
customer	A customer as defined in the <i>Electricity Act</i>
Distribution Lessor Corporation	A subsidiary of the Treasurer of the State of South Australia established by the Public Corporations (Distribution Lessor Corporation) Regulations 1999 and known as "Distribution Lessor Corporation" and includes any entity which replaces or assumes rights or obligations of Distribution Lessor Corporation under a <i>South Australian Distribution Network Lease</i> , by way of succession, assignment, novation, ministerial direction, or otherwise.
Electricity Act	<i>Electricity Act</i> 1996 (SA).
ETSA Corporation	The statutory corporation established pursuant to the Electricity Corporations Act 1994 and known as "ETSA Corporation" and includes its successors and assigns
ETSA Power	The statutory corporation established as a subsidiary of <i>ETSA Corporation</i> by the Public Corporations (ETSA Power) Regulations 1995, and includes its successors and assigns.

Column 1	Column 2
ETSA Transmission Corporation	The statutory corporation established pursuant to the Electricity Corporations Act 1994 and known as "ETSA Transmission Corporation" and includes any party which replaces or assumes rights or obligations of ETSA Transmission Corporation as a party to the <i>South Australian Transmission Lease</i> , by way of succession, assignment, novation, ministerial direction, or otherwise.
Generation Lessor Corporation	A subsidiary of the Treasurer of the State of South Australia established by the Public Corporations (Generation Lessor Corporation) Regulations 1999 and known as "Generation Lessor Corporation" and includes any entity which replaces or assumes rights or obligations of Generation Lessor Corporation under the <i>South Australian Generation Leases</i> , by way of succession, assignment, novation, ministerial direction, or otherwise.
Northern Power Station agreements	The various agreements, documents and deeds in their form as at 1 July 1996 relating to the leasing and ownership of the <i>generating system</i> and associated <i>generating units</i> comprising the Northern Power Station entered into by <i>ETSA Corporation</i> and now under the control of <i>SA Generation Corporation</i>
Northern Power Station Participants	The parties to the <i>Northern Power Station agreements</i> other than <i>SA Generation Corporation</i> .
Osborne agreement	The Agreement dated 4 June 1996 (in its form as at 1 July 1996) between <i>ETSA Corporation</i> and Osborne Cogeneration Pty Ltd and known as the "Osborne Power Purchase Agreement".
South Australian Distribution Network Lease	Any lease with respect to the electricity <i>distribution network</i> , plant and equipment owned by <i>Distribution Lessor Corporation</i> from time to time.
SA Generation Corporation	The statutory corporation established pursuant to the Electricity Corporations Act 1994 and known as "SA Generation Corporation" (trading as Optima Energy), and includes its successors and assigns
South Australian Generation Leases	Leases with respect to electricity <i>generating systems</i> and associated <i>generating units</i> owned by <i>Generation Lessor Corporation</i> from time to time.

Column 1	Column 2
South Australian network	A <i>network</i> situated in South Australia or deemed to be situated in South Australia by operation of clause 9.4.5.
South Australian Transmission Lease	The various agreements, documents and deeds in their form as at 31 August 1998 relating to the leasing and ownership of the <i>transmission network</i> in South Australia entered into by <i>ETSA Transmission Corporation</i> .
South Australian Transmission Lease Participants	The parties to the <i>South Australian Transmission Lease</i> other than <i>ETSA Transmission Corporation</i> .
South Australian Transmission Network Sub Sub Sub Lease	Any sub sub sub-lease (together with any lease or agreement to lease extending beyond the termination date of such sub sub sub lease) with respect to the electricity <i>transmission network</i> , plant and equipment of which <i>ETSA Transmission Corporation</i> is sub sub sub-lessor from time to time.

- (c) **[Deleted]**
- (d) For the purposes of the *Rules* "*applicable regulatory instruments*" includes the following South Australian instruments in relation only to the regulation of *networks*, *network services* and retail sales of electricity in South Australia:
- (i) the *Electricity Act*;
 - (ii) all codes and regulations made and licences issued under the *Electricity Act*;
 - (iii) all regulatory instruments applicable under those licences;
 - (iv) the Electricity Pricing Order made under section 35B of the *Electricity Act*;
 - (v) the *Electricity Corporations (Restructuring and Disposal) Act 1999*;
 - (vi) the *Essential Services Commission Act 2002*; and
 - (vii) all regulations and determinations made under the *Essential Services Commission Act 2002*.

9.26 Transitional Arrangements for Chapter 2 - Registered Participants, Registration And Cross Border Networks

9.26.1 Registration as a Generator

For the purposes of the *Rules*:

- (a) *ETSA Power* and any one person that replaces or assumes rights or obligations of *ETSA Power* as party to the *Osborne agreement*, by way of succession, assignment, novation, ministerial direction, or otherwise, is deemed to be, and at all relevant times to have been, the person who must register as the *Generator* in relation to the *generating system* and associated *generating units* which are the subject of the *Osborne agreement*;
- (b) Osborne Cogeneration Pty Ltd is not to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating system* and associated *generating units* which are the subject of the *Osborne agreement*;
- (c) *SA Generation Corporation* and any person that replaces or assumes rights or obligations of *SA Generation Corporation* as party to the *Northern Power Station agreements*, by way of succession, assignment, novation, ministerial direction, or otherwise, is deemed to be, and at all relevant times to have been, the person that must register as the *Generator* (unless otherwise exempt) in relation to the *generating system* and associated *generating units* which are the subject of the *Northern Power Station agreements*;
- (d) the *Northern Power Station Participants* are not to, and are not to be taken to be entitled to, and are taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating system* and associated *generating units* which are the subject of the *Northern Power Station agreements*;
- (e) clauses 9.26.1(a) and (b) will cease to have effect on the termination of the *Osborne agreement*;
- (f) clauses 9.26.1(c) and (d) will cease to have effect on the termination of the last of the *Northern Power Station agreements*;
- (g) *Generation Lessor Corporation* is not obliged to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating system* and associated *generating units* in South Australia which are the subject of the *South Australian Generation Leases*; and
- (h) clause 9.26.1(g) will apply in respect of each *South Australian Generation Lease* from the time that lease becomes effective and will cease to have effect on the termination of that lease (or the termination of any renewal of that lease).

9.26.2 Registration as a Customer

For the purposes of clause 2.3.1(e), a person may classify its electricity purchased at a *connection point* in South Australia if the person is:

- (a) licensed to retail electricity under the *Electricity Act* and regulations; or
- (b) a *customer* pursuant to the *Electricity Act* and regulations.

9.26.3 Cross Border Networks

(a) If:

- (1) the *Minister* considers that a *transmission network* or *distribution network* situated in South Australia is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and
- (2) the *Minister* for that other *participating jurisdiction* consents,

then those *Ministers* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.

- (b) If a nomination is made under clause 9.26.3(a), then the *jurisdictional derogations* for South Australia do not apply to the extended part of the relevant *network* which is situated in South Australia.
- (c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for South Australia should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the *Minister* in respect of South Australia consents, the *jurisdictional derogations* for South Australia are also to apply to that part of the *network* situated in the other *participating jurisdiction*.

9.26.4 [Deleted]

9.26.5 Registration as a Network Service Provider

For the purpose of the *Rules*:

- (a) the *South Australian Transmission Lease Participants* are not obliged to, and are taken to have been exempted from the requirement to, register as a *Network Service Provider* in relation to the *transmission network* in South Australia which is the subject of the *South Australian Transmission Lease*.

- (b) Clause 9.26.5(a) will cease to have effect on the termination, extension or variation of the *South Australian Transmission Lease*.
- (c) *Distribution Lessor Corporation* is not obliged to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Network Service Provider* in relation to the *distribution network* in South Australia which is the subject of the *South Australian Distribution Network Lease*.
- (d) *ETSA Transmission Corporation* (notwithstanding that it is the owner and sub sub sub lessor of the *transmission network* in South Australia) is not obliged to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Network Service Provider* in relation to the *transmission network* in South Australia which is the subject of the *South Australian Transmission Network Sub Sub Sub Lease*.
- (e) Clause 9.26.5(c) will have effect for the period of each *South Australian Distribution Network Lease* (including the period of any renewal).
- (f) Clause 9.26.5(d) will have effect for the period of each *South Australian Transmission Network Sub Sub Sub Lease* (including the period of any renewal).

9.27 [Deleted]

9.28 Transitional Arrangements for Chapter 5 - Network Connection

9.28.1 Application of clause 5.2

For the purposes of clause 5.2:

- (a) for *facilities* existing at *market commencement*, *Registered Participant* exemptions may be sought from *NEMMCO* in accordance with the *Rules* for particular *facilities* where material departures from the *Rules* are reasonably expected. Any necessity to alter the existing arrangements for *facilities* is to be negotiated and agreed by affected *Registered Participants*;
- (b) South Australia reserves the right to seek further exemptions from *NEMMCO* in accordance with the *Rules* for existing *power stations* if they are unable to meet the requirements of the *Rules* and those exemptions will not result in system damage; and
- (c) **[Deleted]**

- (d) **[Deleted]**
- (e) the provisions in this clause 9.28 apply until there are corresponding changes to the *Rules* which deliver equivalent outcomes to the satisfaction of the South Australian Government.

9.28.2 Regulation of Distribution Network Connection

- (a) Notwithstanding anything to the contrary in the *Rules*, the *Jurisdictional Regulator* appointed for South Australia is responsible for the regulation of access in respect of any *distribution network* situated in South Australia concerning:
 - (i) *connection*;
 - (ii) modification of a *connection*;
 - (iii) *augmentation*;
 - (iv) provision of *network services* and *distribution use of system services*;
 - (v) modification of the provision of *network services* and *distribution use of system services*.
- (b) For the purpose of clause 5.3.6(c), any question as to the fairness and reasonableness of an offer to *connect* in relation to a *distribution network* situated in South Australia is to be decided by the *Jurisdictional Regulator* on the basis of the opinion of the *Jurisdictional Regulator* as to the fairness and reasonableness of the offer.
- (c) If:
 - (1) a dispute arises between or involving two or more *Registered Participants* in respect of:
 - (i) access to;
 - (ii) *connection* to;
 - (iii) use of; or
 - (iv) *distribution network service* pricing for,

a *distribution network* situated in South Australia; and

- (2) the dispute is not resolved by agreement of the parties in dispute within 5 *business days* (or such other period as the parties agree to be an acceptable period) after the dispute first arose,

then the matter in dispute must be referred by the parties in dispute to the *Jurisdictional Regulator* to act as the *Adviser*. If the *Jurisdictional Regulator* thinks it appropriate, it may also act as the *dispute resolution panel* under the dispute resolution procedures set out in Chapter 8, provided that, if the *Jurisdictional Regulator* elects to act as both the *Adviser* and the *dispute resolution panel*, it must make such arrangements as are necessary to

ensure that, in carrying out its functions as the *dispute resolution panel*, no party may be adversely affected by the *Jurisdictional Regulator* having previously acted as the *Adviser*. If the *Jurisdictional Regulator* is unable or unwilling to make such arrangements, then it must appoint a *dispute resolution panel* in accordance with the *Adviser's* functions in Chapter 8.

- (d) This clause expires on 1 July 2010.

9.28.3 System Planning

- (a) In South Australia, the Electricity Supply Industry Planning Council (“*ESIPC*”), established under the *Electricity Act*, will be responsible for network planning as required by this clause 9.28.3.
- (aa) The obligations of *Network Service Providers* with respect to *networks* in South Australia under clauses 5.6.2 and 5.6.2A are varied as follows:
- (i) Except where expressly provided, nothing in this clause 9.28.3 relieves *Network Service Providers* operating in South Australia from their obligations under clause 5.6.
- (ii) The results of planning activities undertaken by *Network Service Providers* pursuant to clause 5.6.2 must be communicated to the *ESIPC* in a manner, form and within a time reasonably determined by the *ESIPC*.
- (iii) Relevant *Network Service Providers* must, as soon as possible, advise the *ESIPC* of the details of any *augmentation* plans arising under clause 5.6.2(c).
- (iv) *Network Service Providers* must, as soon as possible, provide the *ESIPC* with the forecasts, technical limits and details of the proposed corrective actions that are developed in accordance with clause 5.6.2(e).
- (v) The *ESIPC* must prepare the *Annual Planning Report* required under clause 5.6.2A for *networks* in South Australia. Relevant *Network*

Service Providers must prepare the information specified in clause 5.6.2A(b) and supply it to the *ESIPC* by April 30 each year, or by some later date as directed in writing by the *ESIPC*.

- (ab) For the purposes of clause 5.6.3(b), *ESIPC* is the representative of South Australia on the *Inter-regional Planning Committee*.
- (ac) An applicant who proposes to establish a *new large transmission network asset* under clause 5.6.6 must provide the *ESIPC* with a draft summary of the *application notice* 10 *business days* prior to providing a summary of the *application notice* to *NEMMCO*.
- (b) The *ESIPC*:
 - (i) must be an incorporated body;
 - (ii) must register with *NEMMCO* as a *Network Service Provider* under the *Rules*; and
 - (iii) as a registered *Network Service Provider*, must comply with the relevant obligations of a *Network Service Provider*, but does not have to comply with the obligations of clauses 2.11.2 and 5.6.2(e)-(m).
- (c) [Deleted]

9.29 Transitional Arrangements for Chapter 6 - Economic Regulation of Distribution Services

9.29.1 Jurisdictional Regulator

- (a) The South Australian *Essential Services Commission* remains as the *Jurisdictional Regulator* for South Australia until the SA Minister makes a transfer of regulatory responsibility to the *AER* under clause 11.14.4.
- (b) This clause expires on 1 July 2010.

9.29.2 [Deleted]

9.29.3 [Deleted]

9.29.4 [Deleted]

9.29.5 Distribution Network Pricing – South Australia

- (a) In this clause:

price determination means Part B of the 2005–2010 Electricity Distribution Price Determination made under the *Essential Services Commission Act 2002* (SA).

SA Distributor means the *Distribution Network Service Provider* whose *distribution network* is situated in South Australia.

relevant distribution determination means the distribution determination for the *SA Distributor* for the *regulatory control period* that commences in 2010.

small customer has the same meaning as in the *Electricity Act 1996* (SA).

statement of regulatory intent means the *statement of regulatory intent* in regard to the electricity distribution efficiency carryover mechanism issued by the Essential Services Commission on 23 March 2007 under clause 7.4 of the Electricity Pricing Order made by the Treasurer under section 35B of the *Electricity Act 1996* (SA) on 11 October 1999.

- (b) The relevant distribution determination:
- (1) must incorporate appropriate transitional arrangements to take into account the change from a pre-tax to a *post-tax revenue model* (which must be consistent with any agreement between the *AER* and the *SA Distributor* about the arrangements necessary to deal with the transition); and
 - (2) must allow the *SA Distributor* to carry forward impacts associated with the calculation of Maximum Average Distribution Revenue under the price determination into the 2010/11 and 2011/12 *regulatory years*.
- (c) The *efficiency benefit sharing scheme* under the relevant distribution determination must be consistent with the *statement of regulatory intent*.
- (d) The following side constraint is to be applied to tariffs for small customers for the *regulatory control period* to which the relevant distribution determination applies:
- The fixed supply charge component of the tariff must not increase by more than \$10 from one *regulatory year* to the next.
- (e) In preparing its *framework and approach paper* for the distribution determination that is to follow the relevant distribution determination, the *AER* must consider whether the above side constraint should continue with or without modification.
- (f) Any reduction in *transmission network* charges as a result of a regulatory reset (excluding reductions resulting from the distribution of *settlements*

residue and settlements residue auction proceeds) must be paid to all *customers*.

9.29.6 Capital contributions, prepayments and financial guarantees

- (a) The amount that a South Australian *Distribution Network Service Provider* may receive by way of capital contribution, prepayment and/or financial guarantee in respect of a *South Australian network* will be determined by the appropriate regulator in accordance with *applicable regulatory instruments*.
- (b) This clause operates to the exclusion of clause 6.7.2(b) of the former Chapter 6 (as it continues in force under transitional provisions) and clause 6.21.2(2) of the present Chapter 6.
- (c) In this clause:

appropriate regulator means:

- (1) if the South Australian Minister has made no transfer of regulatory responsibility to the *AER* under clause 11.14.4 – the South Australian *Essential Services Commission*;
- (2) if the South Australian Minister has made a transfer of regulatory responsibility to the *AER* under clause 11.14.4 – the *AER*.

9.29.7 Ring fencing

On the *AER's* assumption of responsibility for the economic regulation of *distribution services* in *South Australia*, the *guidelines entitled Operational Ring-fencing Requirements for the SA Electricity Supply Industry: Electricity Industry Guideline No. 9* dated June 2003 (including amendments and substitutions made up to the date the *AER* assumes that responsibility) will be taken to be *distribution ring-fencing guidelines* issued by the *AER* under Rule 6.17.

9.29A Monitoring and reporting

- (a) *NEMMCO* must provide to the *ESIPC* upon request:
 - (i) any information that relates to *interconnectors* into South Australia; and
 - (ii) South Australian market data,

where such information is within *NEMMCO's* control and it is reasonably required to support the performance of the role of jurisdictional Responsible Officer by an officer or employee of the *ESIPC* under the National

Electricity Market Memorandum of Understanding on the Use of Emergency Powers and the regulations under the *Electricity Act*.

- (b) The information referred to in clause 9.29A(a) must be provided by *NEMMCO* via a real time data link or, where that is not available, within a reasonable time.
- (c) Where the cost incurred by *NEMMCO* in providing the information referred to in clause 9.29A(a) exceeds the usual costs which *NEMMCO* incurs in providing any *Market Participant* with information in accordance with the *Rules*, the *ESIPC* must pay the additional costs.

9.30 Transitional Provisions

9.30.1 Chapter 7 - Metering

- (1) The transitional metering provisions set out in schedule 9G1 apply to South Australia in respect of Chapter 7.
- (2) **[Deleted]**
- (3) **[Deleted]**
- (4) **[Deleted]**
- (5) **[Deleted]**

9.30.2 [Deleted]

Schedule 9D1 - [Deleted]

Part E – Jurisdictional Derogations for Queensland

9.31 [Deleted]

9.32 Definitions and Interpretation

9.32.1 Definitions

(a) For the purposes of this Part E:

- (1) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and
- (2) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
connection agreement	Includes all “Connection and Access Agreements” established in Queensland prior to <i>market commencement</i> .
Contestable Customer	A customer prescribed by a regulation made under the <i>Electricity Act</i> as a contestable customer.
Electricity Act	The Electricity Act 1994 (Qld).
exempted generation agreement	An agreement between a <i>State Electricity Entity</i> and the owner or operator of a <i>generating system</i> , as listed at schedule 9E1, and any amendment of such agreement made prior to 13 December 1998 or, if made in accordance with clause 9.34.6(s), thereafter.
GOC Act	The Government Owned Corporations Act 1993 (Qld).
Minister	The Minister administering the <i>Electricity Act</i> from time to time.
Nominated Generator	A <i>State Electricity Entity</i> determined by the <i>Minister</i> for the purposes described in clause 9.34.6 for a <i>generating system</i> to which an <i>exempted generation agreement</i> applies.
Powerlink Queensland	Queensland Electricity Transmission Corporation Ltd, a corporation established under the <i>GOC Act</i> .

Column 1	Column 2
Queensland Competition Authority	The Queensland Competition Authority established under the <i>Queensland Competition Authority Act</i> .
Queensland Competition Authority Act	The Queensland Competition Authority Act 1997 (Qld).
Queensland distribution network	A <i>distribution network</i> (including any part of a <i>distribution network</i>) situated in Queensland.
Queensland Grid Code	The Code of that name first issued by the Department of Mines and Energy (Qld) on 28 November 1994, as amended from time to time.
Queensland system	The sum of the <i>transmission network</i> located in Queensland operating at a nominal <i>voltage</i> of 275 kV, the <i>connection assets</i> associated with that <i>network</i> and any <i>transmission or distribution system connected</i> to that <i>network</i> and also located in Queensland.
Queensland transmission network	A <i>transmission network</i> (including any part of a <i>transmission network</i>) situated in Queensland.
retail authority	An authority of that name issued under the <i>Electricity Act</i> .
Retail Entity	A retail entity as defined in the <i>Electricity Act</i> .
Small Generator	A <i>Generator</i> whose <i>generating system</i> is <i>connected</i> to the <i>Queensland system</i> and has a <i>nameplate rating</i> of less than 5MW.
special approval	An approval of that name issued under the <i>Electricity Act</i> .
Stanwell Corporation Ltd	A corporation established under the <i>GOC Act</i> .
Stanwell Cross Border Leases	The various agreements, documents and deeds relating to the leasing, ownership and operation of the <i>generating systems</i> comprising the <i>Stanwell Power Station</i> entered into, or to be entered into, at the request of, or for the benefit of, one or more of <i>Stanwell Corporation Ltd</i> and the State of Queensland and whether or not any of <i>Stanwell Corporation Ltd</i> or the State of Queensland is a party to those agreements, documents and deeds.
Stanwell Power Station	The <i>power station</i> known as the “Stanwell Power Station” located at Stanwell, Queensland.

Column 1	Column 2
State Electricity Entity	A State electricity entity as defined in the <i>Electricity Act</i> .
transmission authority	An authority of that name issued under the <i>Electricity Act</i> .

- (b) For the purposes of the *Rules*, to the extent that any *network* is located in Queensland, a *network* or part of a *network* is a *transmission network* if and only if it satisfies the following definition of “*transmission network*” and the definition of “*transmission network*” given in the glossary in Chapter 10 does not apply in those circumstances:

transmission network	Despite clause 6A.1.5(b) and the glossary of the <i>Rules</i> , in Queensland the <i>transmission network</i> assets are to be taken to include only those assets owned by <i>Powerlink Queensland</i> or any other <i>Transmission Network Service Provider</i> that holds a <i>transmission authority</i> irrespective of the <i>voltage</i> level and does not include any assets owned by a <i>Distribution Network Service Provider</i> whether or not such <i>distribution</i> assets are operated in parallel with the <i>transmission system</i> .
-----------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

9.32.2 Interpretation

In this Part E, a reference to any authority, corporation or body whether statutory or otherwise, in the event of that authority, corporation or body ceasing to exist or being reconstituted, renamed or replaced or its powers, duties or functions being transferred to or assumed by any other authority, corporation or body, will, as the case requires, be taken to refer to the authority, corporation or body replacing it or the authority, corporation or body, succeeding to or assuming the powers, duties or functions of it.

9.33 Transitional Arrangements for Chapter 1

9.33.1 [Deleted]

9.34 Transitional Arrangements for Chapter 2 - Registered Participants and Registration

9.34.1 Application of the Rules in Queensland (clauses 2.2 and 2.5)

Any person who engages in the activity of owning, controlling or operating:

- (a) a *generating system* that *supplies* electricity to a *transmission or distribution system* of a kind referred to in clause 9.34.1(b); or
- (b) a *transmission or distribution system* in Queensland which does not form part of the *national grid*,

is not to, and is not to be taken to be entitled to, and is taken to have been exempted from the requirement to, register as a *Registered Participant* in relation to that activity.

9.34.2 Stanwell Cross Border Leases (clause 2.2)

- (a) *Stanwell Corporation Ltd* is deemed to be the person that must register as a *Generator* in relation to the *generating systems* which are the subject of the *Stanwell Cross Border Leases*.
- (b) The parties (other than *Stanwell Corporation Ltd*) to the *Stanwell Cross Border Leases* are not to be and are not to be entitled to, and are taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating systems* which are the subject of the *Stanwell Cross Border Leases*.
- (c) Clauses 9.34.2(a) and (b) cease to have effect upon the expiry or earlier termination of the last of the *Stanwell Cross Border Leases*.

9.34.3 [Deleted]

9.34.4 Registration as a Customer (clause 2.3.1)

- (a) [Deleted]
- (b) Subject to clause 9.34.4(c), for the purpose of clause 2.3.1(e), a person satisfies the requirements of Queensland for classification of a *connection point* if that person is:
 - (1) a *Contestable Customer* in relation to that *connection point*; or
 - (2) a *Retail Entity* who is:
 - (i) authorised by a *retail authority* to sell electricity to the person *connected* at that *connection point*; or
 - (ii) the *Local Retailer* for the *local area* in which the *connection point* is located; or
 - (iii) the holder of a *special approval* which authorises the person to:
 - (A) purchase electricity in the *market* in respect of that *connection point*; or

- (B) sell electricity to the person *connected* at that *connection point*; or
- (iv) a person exempted under the *Electricity Act* from the operation of section 89(1) of the *Electricity Act* in relation to the sale of electricity to the person *connected* at that *connection point*.
- (c) For the purpose of clause 2.3.1(e), a person does not satisfy the requirements of Queensland for classification of its electricity purchased at a *connection point* in Queensland if the electricity is supplied through a *transmission or distribution system* which does not form part of the *national grid*.
- (d) [Deleted]

9.34.5 There is no clause 9.34.5

9.34.6 Exempted generation agreements (clause 2.2)

- (a) For the purpose of supplying electricity under any *exempted generation agreement*, for each *generating system* which forms part of one of the *power stations* listed in schedule 9E1 the Minister may determine, in consultation in each case with the owner of the relevant *generating system*, whether a *State Electricity Entity* (the “*Nominated Generator*”), rather than another person engaging in the activity of owning, operating or controlling the *generating system*, should be the *Generator* in respect of the *generating system*.
- (b) For the purposes of the *Rules* if the *Minister* has determined a *Nominated Generator* for any *generating system* as described in clause 9.34.6(a):
 - (1) the *Nominated Generator* is taken to be, and at all relevant times to have been, and is the person that must register as, a *Generator* in relation to that *generating system*; and
 - (2) any person engaging in the activity of owning, controlling or operating that *generating system*, not being the *Nominated Generator*, is not to, is not entitled to, and is taken to have been exempted from the requirement to, register as a *Generator* in relation to that *generating system*.
- (c) If complying with a requirement of the *Rules* (“the *Rules Requirement*”) would result in a *Nominated Generator* being in breach of a provision of an *exempted generation agreement* to which it is a party (the “*contractual requirement*”), the *Nominated Generator* is not required to comply with the *Rules requirement* to the extent of the inconsistency between the *Rules requirement* and the *contractual requirement* provided that this

clause 9.34.6(c) must not be interpreted to relieve a *Nominated Generator* of the obligation to submit offers in respect of a *scheduled generating unit* or to operate the *generating unit* in accordance with *dispatch instructions* determined under Chapter 3.

(d) If:

- (1) a *Nominated Generator* requires the co-operation of one or more of the parties to an *exempted generation agreement* (a “*counterparty*”) in order to enable the *Nominated Generator* to comply with the *Rules requirement*;
- (2) the *Nominated Generator* has used its reasonable endeavours to obtain the *counterparty's* co-operation in order to enable the *Nominated Generator* to comply with the *Rules requirement*; and
- (3) the *Nominated Generator* has no ability to require the *counterparty* to so co-operate with the *Nominated Generator* and the *counterparty* is not in breach of the *exempted generation agreement* by refusing to so co-operate,

then the *Nominated Generator* is not required to comply with the *Rules requirement*.

(e) If a *Nominated Generator* does not comply with a *Rules requirement* in the circumstances set out in clause 9.34.6(c) or (d), the *Nominated Generator* must:

- (1) give notice to the *AER* as soon as practicable, and in any event before the expiration of *7 days* after the non-compliance with the *Rules requirement* occurs or commences, of:
 - (a) details of the *Rules requirement* which has not been or will not be complied with;
 - (b) details of each act or omission which partly or wholly constitutes non-compliance with that *Rules requirement*;
 - (c) in the case of circumstances described in clause 9.34.6(c), unless explicitly prohibited by the terms of the relevant *exempted generation agreement*, details of each *contractual requirement* which is considered by the *Nominated Generator* to be inconsistent with the *Rules requirement*; and
 - (d) in the case of circumstances described in clause 9.34.6(d), details of the endeavours made by the *Nominated Generator* to obtain the *counterparty's* co-operation to enable the *Nominated Generator* to comply with the *Rules requirement*; and

- (2) unless explicitly prohibited by the terms of the relevant *exempted generation agreement*, give the *AER* any documents or information in the possession or control of the *Nominated Generator* which evidence the matters referred to in clause 9.34.6(e)(1) within 14 *days* (or any further period agreed to by the *AER*) of receiving a written request from the *AER*.
- (f) To avoid any doubt, if after reviewing a notice and any documents or information given by the *Nominated Generator* under clause 9.34.6(e), the *AER* forms the view that:
 - (1) in the case of circumstances described in clause 9.34.6(c), compliance with the *Rules requirement* would not have resulted in the *Nominated Generator* being in breach of the relevant *contractual requirement*; or
 - (2) in the case of circumstances described in clause 9.34.6(d), any of the requirements of clause 9.34.6(d) were not in fact satisfied,

then the matter may be dealt with by the *AER* as a breach of the *Rules*.

- (g) **[Deleted]**
- (h) A *Nominated Generator* may give notice and information to the *AER* as required in clause 9.34.6(e) in advance if it becomes aware of the potential for the circumstances described in clause 9.34.6(c) or 9.34.6(d) to arise, and the giving of that notice and information will be taken to satisfy the requirements of the *Nominated Generator* in clause 9.34.6(e)(1) in respect of those circumstances.
- (i) Notwithstanding the provision of notice and information in advance in accordance with clause 9.34.6(h), the *Nominated Generator* must provide such other documents or information as may be required in accordance with clause 9.34.6(e) after such non-compliance has occurred or commenced.
- (j) If non-compliance with the *Rules* is continuing, the notice of non-compliance with the *Rules* provided under clause 9.34.6(e) will be effective in relation to that non-compliance until that non-compliance ends provided that:
 - (1) the notice specifies that the non-compliance is continuing; and
 - (2) the *Nominated Generator* notifies the *AER* of the end of the non-compliance no later than 7 days after the non-compliance ends.
- (k) Clauses 9.34.6(c) and 9.34.6(d) do not affect the obligations of a *Nominated Generator* with respect to registration with *NEMMCO* or to making payments under the provisions of the *Rules* in respect of:
 - (1) *Participant fees*;

- (2) *prudential requirements*; or
- (3) *settlement amounts*.
- (l) Within 30 *days* of the end of each quarter in each calendar year, the *AER* must prepare a quarterly report for the previous quarter and make it available upon request to all *Registered Participants* and those *participating jurisdictions* that participated in the *market* during the quarter covered by the report. The quarterly report must include:
 - (1) a summary of the acts or omissions of the *Nominated Generator* constituting non-compliance with any requirement of the *Rules*, as disclosed in written notices received by the *AER* under this clause 9.34.6 during the quarter covered by the report: and
 - (2) an assessment by the *AER* of the effect that those acts or omissions have had on the efficient operation, during the quarter covered by the report, of the *spot market*.
- (m) **[Deleted]**
- (n) No amendment, other than an amendment to correct a typographical error, may be made to an *exempted generation agreement* unless the parties to the *exempted generation agreement* submit to the *AER*:
 - (1) the proposed amendment, a copy of the *exempted generation agreement* and such supporting information as the parties consider necessary (the “EGA amendment material”);
 - (2) a request that the *AER* seek advice from the *ACCC* as to whether the *ACCC* considers that the proposed amendment would or may:
 - (i) **[Deleted]**
 - (ii) **[Deleted]**
 - (iii) contravene a provision of the Trade Practices Act 1974 (Cth) or the Competition Code of a *participating jurisdiction*; and
 - (3) if requested by the *AER* to do so, such further information as may be required by the *AER* in order for the *ACCC* to consider the matters referred to in clause 9.34.6(n)(2),and the proposed amendment is not prohibited under clause 9.34.6(q).
- (o) When the parties to an *exempted generation agreement* submit EGA amendment material to the *AER* in accordance with clause 9.34.6(n), they may include as part of the material submitted a written request that the *AER*

and the ACCC treat the EGA amendment material as confidential. In such a case the *AER*:

- (1) must comply with that request until such time as the parties to the *exempted generation agreement* notify the *AER* in writing that the *AER* is no longer under an obligation to do so; and
- (2) must not provide any EGA amendment material to the ACCC unless the parties to the *exempted generation agreement* have notified the *AER* in writing that they have agreed acceptable confidentiality arrangements in relation to the EGA amendment material with the ACCC and that the *AER* should provide the EGA amendment material to the ACCC.

(p) **[Deleted]**

(q) If, within 10 *business days* of receiving the material referred to in clause 9.34.6(n) or such other period as is agreed between the *AER* and the parties to the *exempted generation agreement*, the *AER* responds that:

- (1) the ACCC considers that the proposed amendment would or may have any or all of the effects referred to in clause 9.34.6(n)(2); or
- (2) the ACCC considers that it is unable, because of:
 - (i) insufficient information before it; or
 - (ii) any confidentiality arrangements in relation to the EGA amendment material agreed between the ACCC and the parties to the *exempted generation agreement*,

to reasonably consider whether the proposed amendment would have any or all of the effects referred to in clause 9.34.6(n)(2),

then the proposed amendment must not be made.

(r) If the *AER* has not provided a response to a request made in accordance with clause 9.34.6(n)(2) within:

- (1) 10 *business days* of receiving the material referred to in clause 9.34.6(n); or
- (2) such other period as is agreed between the *AER* and the parties to the *exempted generation agreement*,

the ACCC is deemed to have no objection to the proposed amendment.

(s) If the *AER* notifies the parties to the *exempted generation agreement* that the ACCC has no objection to the proposed amendment, or if the ACCC is deemed under clause 9.34.6(r) to have no objection to the proposed

amendment, the parties to the *exempted generation agreement* may make the proposed amendment.

- (t) This clause 9.34.6 ceases to have effect in respect of a *generating system* the subject of an *exempted generation agreement* upon the termination of that agreement.

9.35 [Deleted]

9.36 [Deleted]

9.37 Transitional Arrangements for Chapter 5 - Network Connection

9.37.1 [Deleted]

9.37.2 Existing connection and access agreements (clause 5.2)

- (a) The technical connection and network pricing requirements of the Interconnection and Power Pooling Agreement dated 30 March 1994 between the owners of the Gladstone Power Station and the Queensland Electricity Commission (as amended prior to 18 January 1998) are to be taken to be a *connection agreement* in respect of both the Gladstone Power Station and the Boyne Island aluminium smelter unless replacement *connection agreements* are entered into in respect of the power station and smelter.
- (b) Despite anything to the contrary in clause 5.2.2, if the *generating system* at Gladstone Power Station meets the technical connection requirements of the Interconnection and Power Pooling Agreement, or the technical requirements of a replacement *connection agreement* no less onerous than those in the Interconnection and Power Pooling Agreement, the relevant *generating system* is to be deemed to comply with all the technical connection requirements of the *Rules* in respect of the Gladstone Power Station.
- (c) Despite anything to the contrary in clause 5.2.2, if the Boyne Island aluminium smelter meets the technical connection requirements of the Interconnection and Power Pooling Agreement, or the technical requirements of a replacement *connection agreement* no less onerous than those in the Interconnection and Power Pooling Agreement, the Boyne Island aluminium smelter is to be deemed to comply with all the technical connection requirements of the *Rules* in respect of the Boyne Island aluminium smelter.
- (d) Despite anything to the contrary in clause 5.2.2, if Queensland Rail complies with the technical requirements in the *connection agreements* for Queensland Rail *connections* as at 18 January 1998, Queensland Rail is to

be deemed to comply with all the technical connection requirements of the *Rules*.

- (e) *Small Generators* are not required to comply with the conditions of *connection* set out in schedule 5.2 of the *Rules*.

9.37.3 [Deleted]

9.37.4 Regulation of distribution network connection (clause 5.3)

- (a) This clause 9.37.4 applies in respect of the regulation of *connection* to a *Queensland distribution network*.
- (b) Despite anything to the contrary in the *Rules*, the appropriate regulator is responsible for the regulation of *connection* to a *Queensland distribution network*.
- (c) The appropriate regulator is:
 - (1) until the date the *AER* assumes responsibility for the regulation of *connection* to the *Queensland distribution network* – the *Jurisdictional Regulator* for Queensland; and
 - (2) from that date – the *AER*.
- (d) For the purposes of clause 5.3.6(c), any question as to the fairness and reasonableness of an offer to *connect* to a *Queensland distribution network* is to be decided by the appropriate regulator on the basis of the appropriate regulator's opinion of the fairness and reasonableness of the offer.
- (e) If a dispute arises in relation to *connection* to a *Queensland distribution network*, then that dispute must be resolved in accordance with Chapter 8 and for this purpose a reference in Chapter 8 to “*power system*” is deemed to be a reference to the “*Queensland system*”.
- (f) This clause expires on 1 July 2010.

9.37.5 Forecasts for connection points to transmission network (clause 5.6.1)

If a *Network Service Provider*, on the *Queensland system*, modifies forecast information in accordance with clause 5.6.1(d), then that *Network Service Provider* is not required to notify the relevant *Registered Participant* if it has conflicting confidentiality obligations to other *Registered Participants*.

9.37.6 There is no clause 9.37.6

9.37.7 Cross Border Networks

(a) If:

(1) the *Minister* considers that a *transmission network* or *distribution network* situated in Queensland is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and

(2) the *Minister* for that other *participating jurisdiction* consents,

then those *Ministers* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.

(b) If a nomination is made under clause 9.37.7(a), then the *jurisdictional derogations* for Queensland do not apply to the continuation of the relevant *network* which is situated in Queensland.

(c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for Queensland should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the *Minister* in respect of Queensland consents, the *jurisdictional derogations* for Queensland are also to apply to that part of the *network* situated in the other *participating jurisdiction*.

9.37.8 [Deleted]

9.37.9 Credible contingency events (clause S5.1.2.1 of schedule 5.1)

(a) The *protection systems* installed on any 110/132kV lines located in Queensland and existing at *market commencement* are deemed to comply with clause S5.1.2.1(d) of schedule 5.1 of the *Rules* except where such *protection system* has a material effect in degrading the stability and security of the *Queensland system* or the *power system*.

9.37.10 Reactive power capability (clause S5.2.5.1 of schedule 5.2)

Clause S5.2.5.1 of schedule 5.2 of the *Rules* is replaced for each of the *generating units* situated at the relevant *power station* listed in the following table by the following:

For the purpose of this clause S5.2.5.1:

'*rated active power output*' means the 'Rated MW (Generated)' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*; and

'*nominal terminal voltage*' means the 'Nominal Terminal Voltage' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*.

- (a) Each of the *generating units*, while operating at any level of *active power output*, must be capable of:
- (1) supplying at its terminals an amount of *reactive power* of at least the amount that would be supplied if the *generating unit* operated at *rated active power output*, *nominal terminal voltage* and a lagging power factor of 0.9; and
 - (2) absorbing at its terminals an amount of *reactive power* of at least the amount that would be absorbed if the *generating unit* operated at *rated active power output*, *nominal terminal voltage* and a leading power factor set out in respect of that *generating unit* in column 3 of the following table.
- (b) In the event that any of the relevant power factors referred to in paragraph (a) above cannot be provided in respect of a *generating unit*, the relevant *Generator* must reach a commercial arrangement under its *connection agreement* with the relevant *Network Service Provider*, or with another *Registered Participant*, for the supply of the deficit in *reactive power* as measured at that *generating unit's* terminals.

Power station	Generating units	Leading power factor
Gladstone	Units 1 to 4	0.99
Gladstone	Units 5 & 6	0.94
Tarong	Units 1 to 4	0.95
Callide "A"	Units 1 to 4	0.95
Callide "B"	Units 1 & 2	0.95
Stanwell	Units 1 to 4	0.95
Swanbank "B"	Units 1 to 4	0.97
Mount Stuart	Units 1 & 2	0.95
Collinsville	Units 1 to 5	0.95

9.37.11 [Deleted]

9.37.12 Voltage fluctuations (clause S5.1.5 of schedule 5.1)

For application in Queensland, clause S5.1.5 of schedule 5.1 of the *Rules* is replaced with the following:

"A *Network Service Provider* whose *network* is a *Queensland transmission network* or a *Queensland distribution network* must include conditions in *connection agreements* in relation to the permissible variation with time of the power *generated* or *load* taken by a *Registered Participant* to ensure that other *Registered Participants* are supplied with a power-frequency *voltage* which fluctuates to an extent that is less than the limit defined by the "Threshold of Perceptibility" or the "Threshold of Irritability" as the case may be for the conditions specified in the paragraph below, in Figure 1 of *Australian Standard AS2279*, Part 4.

A *Network Service Provider* whose *network* is a *Queensland transmission network* or a *Queensland distribution network* must ensure that *voltage* fluctuations caused by the switching or operation of *network plant* does not exceed the following amounts referenced to Figure 1 of *Australian Standard AS 2279*, Part 4:

- (1) Above 66kV:
 - (A) the "Threshold of Perceptibility" when all *network plant* is in service; and
 - (B) the "Threshold of Irritability" during any *credible contingency event* which is reasonably expected to be of short duration;
- (2) 66kV and below: the "Threshold of Irritability" when all *network plant* is in service.

The requirements of paragraphs (1) and (2) above do not apply to events such as switching of *network plant* to or from an abnormal state or to *network* faults which occur infrequently (ie. less than one event per day).

Where the *Rules* (other than this Part E) refer to clause S5.1.5(a) or (b) of schedule 5.1 of the *Rules* then, in so far as that reference relates to a *Network Service Provider* whose *network* is a *Queensland transmission network* or a *Queensland distribution network* or to a *network* which is a *Queensland transmission network* or a *Queensland distribution network*, that reference must be construed as a reference to the immediately preceding paragraph.

A *Network Service Provider* whose *network* is a *Queensland transmission network* or a *Queensland distribution network* is responsible only for excursions in *voltage* fluctuations outside the range defined in the first two paragraphs of this clause S5.1.5 caused by *network plant* and the pursuit of

all reasonable measures available under the *Rules* to remedy the situation in respect of *Registered Participants* whose *plant* does not perform to the standards defined by clause S5.2.5.2(c) of schedule 5.2 of the *Rules* for *Generators*, the standards set out in the first paragraph below for *Customers* and the standards set out in the second paragraph below for *Market Network Service Providers*.

Each *Customer* must ensure that variations in current at each of its *connection points* including those arising from the *energisation*, de-energisation or operation of any *plant* within or supplied from the *Customer's substation* are such that the contribution to the magnitude and rate of occurrence of the resulting *voltage* disturbance does not exceed the following limits:

- (i) where only one *Customer* has a *connection point* associated with the point of *supply*, the limit is 80% of the threshold of perceptibility set out in Figure 1 of *Australian Standard AS2279*, Part 4; or
- (ii) where two or more *Distribution Network Service Providers* or *Customers* causing *voltage* fluctuations have a *connection point* associated with a point of *supply*, the threshold of perceptibility limit is to be shared in a manner to be agreed between the *Distribution Network Service Provider* and the *Registered Participant* in accordance with *good electricity industry practice* that recognises the number of *Registered Participants* in the vicinity that may produce *voltage* fluctuations.

Each *Market Network Service Provider* must ensure that variations in current at each of its *connection points* arising from the *energisation*, de-energisation or operation of any of its *plant* involved in the provision of *market network services* are such that the contribution to the magnitude and rate of occurrence of the resulting *voltage* disturbance does not exceed the following limits:

- (i) where only one *Market Network Service Provider* has a *connection point* associated with the point of *supply*, the limit is 80% of the threshold of perceptibility set out in Figure 1 of *Australian Standard AS2279*, Part 4; or
- (ii) where two or more *Distribution Network Service Providers*, *Market Network Service Providers* or *Customers* causing *voltage* fluctuations have a *connection point* associated with a point of *supply*, the threshold of perceptibility limit is to be shared in a manner to be agreed between the *Distribution Network Service Provider* and the *Registered Participant* in accordance with *good electricity industry practice* that recognises the number of *Registered Participants* in the vicinity that may produce *voltage* fluctuations.

For these purposes, references to *Australian Standard AS2279* are references to that standard as it existed prior to it being superseded by AS/NZS 61000.3.7:2001."

9.37.13 [Deleted]

9.37.14 [Deleted]

9.37.15 [Deleted]

9.37.16 [Deleted]

9.37.17 [Deleted]

9.37.18 [Deleted]

9.37.19 Generating unit response to disturbances (clause S5.2.5.3 of schedule 5.2)

- (a) Despite the provisions of clause S5.2.5.3 of schedule 5.2 of the *Rules*, the *generating units* listed in the following table are not required to operate continuously outside the corresponding *frequency band* specified in column three of the following table:

Power station	Generating units	Frequency band
Tarong	Units 1 to 4	47.5 Hz to 51 Hz
Callide "B"	Units 1 & 2	47.5 Hz to 51 Hz
Stanwell	Units 1 to 4	47.5 Hz to 51 Hz
Gladstone	Units 1 to 6	47.5 Hz to 51.5 Hz
Collinsville	Units 1 to 4	48.0 Hz to 51 Hz
	Unit 5	48.0 Hz to 52 Hz

- (b) **[Deleted]**

- (b1) **[Deleted]**

9.37.20 Frequency control (clause S5.2.5.11 of schedule 5.2)

For each of the *generating units* situated at the *power stations* listed in the following table, the application of clause S5.2.5.11 of schedule 5.2 of the *Rules* is modified by deleting clause S5.2.5.11(b)(3) and replacing it with the following:

“(d) A *Generator* must ensure that each of its *scheduled generating units* is capable of automatically increasing its *active power* output by 4% for a 0.1 Hz reduction in *system frequency*”.

Power station	Generating units
Tarong	Units 1 to 4
Callide “A”	Units 1 to 4
Callide “B”	Units 1 & 2
Stanwell	Units 1 to 4
Swanbank “A”	Units 1 to 6
Swanbank “B”	Units 1 to 4

9.37.21 Excitation control system (clause S5.2.5.13 of schedule 5.2)

- (a) For each of the *generating units* listed in the following table:
- (1) the application of clause S5.2.5.13(a) of schedule 5.2 of the *Rules* is modified by amending it to ensure that the short-time average *generating unit stator voltage* at highest rated power output level is not required to be more than 5% above nominal *stator voltage*; and
 - (2) the application of clause S5.2.5.13(b) of schedule 5.2 of the *Rules* is modified by deleting the words “all operating conditions” and replacing them with the words “all normal operating conditions and any credible contingency event ~~all single credible contingency events~~”.
- (b) For Wivenhoe Power Station, the application of clause S5.2.5.13(c) of schedule 5.2 of the *Rules* is modified by replacing sub-clause (c) with the words “providing a five second ceiling *excitation voltage* to a maximum of 730 V *excitation voltage*.”
- (c) **[Deleted]**
- (d) For Collinsville Power Station, any variation to the minimum performance requirements specified in clause S5.2.5.13 of schedule 5.2 of the *Rules* is to be limited to figures agreed with the *Network Service Provider* to whose *network* the Collinsville Power Station is *connected*.

Power station	Generating units
Tarong	Units 1 to 4
Callide “A”	Units 1 to 4
Callide “B”	Units 1 & 2
Stanwell	Units 1 to 4
Swanbank “A”	Units 1 to 6
Swanbank “B”	Units 1 to 4
Wivenhoe	Units 1 & 2
Barron Gorge	Units 1 & 2
Kareeya	Units 1 to 4
Gladstone	Units 1 to 6
Collinsville	Units 1 to 5

- (e) A *Generator* whose *generating unit* is situated in Queensland must ensure that each new *synchronous generating unit* of greater than 100MW is fitted with a *static excitation system* or some other *excitation control system* which will provide *voltage* regulation to within 0.5% of the selected setpoint value unless otherwise agreed with the relevant *Network Service Provider*.

9.37.22 [Deleted]

9.37.23 Annual forecast information for planning purposes (schedule 5.7)

Each *Registered Participant* that has a *connection point* to a *Queensland transmission network* must submit to the relevant *Queensland Transmission Network Service Provider* a forecast of the annual *energy* consumption associated with each *connection point* together with the information set out in schedule 5.7 of the *Rules*.

9.38 Transitional Arrangements for Chapter 6 - Network Pricing

9.38.1 [Deleted]

9.38.2 [Deleted]

9.38.3 Arrangements for regulation of distribution pricing

- (a) The *Queensland Competition Authority* remains *Jurisdictional Regulator* for Queensland until the Queensland Minister makes a transfer of regulatory responsibility to the *AER* under clause 11.14.4.

- (b) Subject to clause 11.14.3, the regulation of *distribution network* service pricing for a *Queensland distribution network* must be in accordance with the *Electricity Act* and the *Queensland Competition Authority Act*.
- (c) This clause expires on 1 July 2010 or an earlier date nominated by the Queensland Minister.

9.38.4 Interconnectors between regions

For the purposes of the *Rules*, the *interconnector* between Armidale in New South Wales and Tarong in Queensland, to the extent that it forms part of the *Queensland system*, is deemed to be a *regulated interconnector*.

9.38.5 Transmission pricing for exempted generation agreements

- (a) Notwithstanding the provisions of Chapter 6, the amounts payable for *transmission services* in respect of a *generating system* or a *load* the subject of an *exempted generation agreement* by a *Generator* or *Customer* which is referred to in an *exempted generation agreement*, or the relevant *State Electricity Entity* nominated pursuant to clause 9.34.6(a), as the case may be, will be the amounts payable under the *connection agreement* in respect of that *generating system* or *load*.
- (b) If the amounts payable for *transmission services* under clause 9.38.5(a) differ to those that would have been payable if the amounts had been calculated in accordance with the provisions of Chapter 6 (as modified by this clause 9.38) then the amount of that difference is to be recovered in accordance with clause 6.5.6(a).
- (c) For the purpose of clause 9.38.5(b), the amount of any difference is to be recovered from *Transmission Customers* located in Queensland and connected to the *Queensland system* and is not otherwise to be taken into account in determining *Transmission Customer common service charges* under clause 6.5.6(a).
- (d) For the application of clause 9.38.5(a) to the *generating system* at Gladstone Power Station and the *load* at the Boyne Island aluminium smelter, the *connection agreement* referred to is the Interconnection and Power Pooling Agreement dated 30 March 1994 between the owners of the Gladstone Power Station and the Queensland Electricity Commission (as amended prior to 18 January 1998), or any *connection agreements* entered into in respect of those *connection points* in replacement of that agreement, provided that in the latter case any difference to be recovered pursuant to clause 9.38.5(b) must not exceed that which would have applied had that agreement continued.
- (e) Clause 9.38.5(a) continues to apply in respect of the *generating system* at Gladstone Power Station and the *load* at the Boyne Island aluminium

smelter despite the entering into *connection agreements* in replacement of the Interconnection and Power Pooling Agreement as envisaged in clause 9.38.5(d).

9.39 Transitional Arrangements for Chapter 7 - Metering

9.39.1 Metering installations to which this clause applies

- (a) The transitional *metering* provisions set out in schedule 9G1 apply to Queensland in respect of Chapter 7.
- (b) Notwithstanding the application of schedule 9G1 in Queensland, the transitional arrangements set out in this clause 9.39 apply in relation to a *metering installation* (including a *check metering installation*) that meets the following criteria:
 - (1) at 1 October 1997, the *metering installation*:
 - (i) was a *metering installation* to which the *Queensland Grid Code* applied; and
 - (ii) complied with the metering requirements of the *Queensland Grid Code*; and
 - (2) excepting normal repair and maintenance, no part of the *metering installation* has been modified or replaced since 1 October 1997.

9.39.2 [Deleted]

9.39.3 [Deleted]

9.39.4 [Deleted]

9.39.5 [Deleted]

9.40 Transitional Arrangements for Chapter 8 - Administration Functions

9.40.1 [Deleted]

9.40.2 [Deleted]

9.40.3 [Deleted]

9.41 [Deleted]

Schedule 9E1 - Exempted Generation Agreements

Station Name	Owner or Operator of Station	Date of Agreement
Gladstone Power Station	GPS Participants ¹	30 March 1994
Collinsville Power Station	Collinsville Participants ²	30 November 1995
Townsville Power Station	Transfield Townsville Pty Ltd A.C.N. 075 001 991	2 August 1996
Oakey Power Station	Oakey Power Pty Ltd A.C.N. 075 258 114	10 September 1996
Mt Stuart Power Station	Origin Energy Mt Stuart, a general partnership between Origin Energy Mt Stuart BV (ARBN 079 232 572) & Origin Energy Australia Holdings BV (ARBN 079 234 165)	5 August 1996
Various Sugar Mills	Queensland Sugar Power Pool Pty Ltd A.C.N. 072 003 537	21 December 1995
Somerset Dam Hydro	Hydro Power Pty Ltd A.C.N. 010 669 351	1 June 1996
Browns Plains Landfill Gas	EDL LFG (QLD) Pty Ltd A.C.N. 071 089 579 and Energex Limited A.C.N. 078 849 055	31 July 1996

1

GPS Participants Each of: GPS Power Pty Ltd, A.C.N. 009 103 422;
GPS Energy Pty Ltd, A.C.N. 063 207 456;
Sunshine State Power B.V., A.R.B.N. 062 295 425;
Sunshine State Power (No 2) B.V., ARBN 063 382 829;
SLMA GPS Pty Ltd, A.C.N. 063 779 028;
Ryowa II GPS Pty Ltd, A.C.N. 063 780 058; and
YKK GPS (Queensland) Pty Ltd, A.C.N. 062 905 275.

2

Collinsville Participants Each of: Transfield Collinsville Pty Ltd, A.C.N. 058 436 847; and
Transfield Services Collinsville B.V., A.R.B.N. 070 968 606.

Part F – Jurisdictional Derogations for Tasmania

9.41A [Deleted]

9.42 Definitions and interpretation

9.42.1 Definitions

For the purposes of this Part F:

- (a) a word or expression defined in the glossary in chapter 10 has the meaning given to it in the glossary, unless it is referred to in column 1 of the following table; and
- (b) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
Aurora	Aurora Energy Pty Ltd (ABN 85 082 464 622).
Basslink	The project for the interconnection, by means of a DC electricity transmission link, of the Victorian and Tasmanian <i>transmission systems</i> .
ESI Act	The Electricity Supply Industry Act 1995 (Tas).
George Town Substation	The electricity substation located on the land comprised in Certificate of Title Volume 34076 Folio 1.

Column 1	Column 2
Hydro Tasmania	The Hydro-Electric Corporation (ABN 48 072 377 158).
Interconnection Date	The date on which <i>Basslink</i> enters into commercial operation, being the Commissioning Date as defined in the Basslink Project Interpretation Memorandum dated 29 November 2002 between the Crown in right of the State of Tasmania, Basslink Pty Ltd, National Grid Transco plc, National Grid Holdings Limited and <i>Hydro Tasmania</i> .
Minister	The Minister for the time being responsible for administering the <i>ESI Act</i> .
National Electricity Code	The code of conduct called the National Electricity Code approved, in accordance with section 6(1) of the Old National Electricity Law, as the initial Code for the purposes of that Law, and as amended from time to time in accordance with its terms and the Old National Electricity Law.
Old National Electricity Law	The Schedule to the National Electricity (South Australia) Act 1996 (SA) as in force from time to time before the commencement of section 12 of the National Electricity (South Australia) (New National Electricity Law) Amendment Act 2005 (SA).
Price Control Regulations	The Electricity Supply Industry (Price Control) Regulations made under the <i>ESI Act</i> .
Reliability and Network Planning Panel	The panel of that name established by the <i>Tasmanian Electricity Regulator</i> of the <i>Tasmanian Code</i> .
Retail Licence	A licence authorising the retailing of electricity issued under the <i>ESI Act</i> .

Column 1	Column 2
Tasmanian Code	The Tasmanian Electricity Code issued under section 49A of the <i>ESI Act</i> .
Tasmanian Code Participant	A person who is a Code Participant within the meaning of the <i>Tasmanian Code</i> .
Tasmanian Determination on Power System Frequency Operating Standards	The Determination on Frequency Operating Standards for the Tasmanian Power System issued by the <i>Reliability and Network Planning Panel</i> .
Tasmanian Electricity Regulator	The office of the Regulator established pursuant to section 5 of the <i>ESI Act</i> .
Tasmanian Network Service Provider	A person who is a <i>Network Service Provider</i> in respect of a <i>network</i> located in Tasmania (including the <i>Network Service Provider</i> in respect of <i>Basslink</i>).
Tasmanian power system security and reliability standards	The standards governing security and reliability of the power system located in Tasmania determined by the <i>Reliability and Network Planning Panel</i> in accordance with the <i>Tasmanian Code</i> , including the <i>Tasmanian Determination on Power System Frequency Operating Standards</i> and the standards for capacity reserves.
Third Tranche Commencement Date	The day which the <i>Minister</i> notifies <i>NEMMCO</i> is the day on which customers taking an amount of electricity equal to or in excess of 0.75GWh/yr and less than 4GWh/yr at a <i>connection point</i> in Tasmania first become contestable customers (within the meaning of the <i>ESI Act</i>).
Transend	Transend Networks Pty Limited (ABN 57 082 586 892).
Transition Date	The date on and from which section 6 of the Electricity - National Scheme (Tasmania) Act 1999 commences.

9.42.2 Interpretation

In this Part F, references to Tasmania do not include King Island or Flinders Island unless the context otherwise requires.

9.42.3 National grid, power system and related expressions

Notwithstanding anything else in the *Rules*, but subject to the other provisions of this Part F, on and from the *Transition Date*:

- (a) the *connected transmission systems* and *distribution systems* located in Tasmania are to be treated as forming part of the *national grid* and the interconnected *transmission* and *distribution networks*; and
- (b) the electricity power system located in Tasmania, including associated *generation* and *transmission* and *distribution networks* for the *supply* of electricity, is to be treated as forming part of the *power system* and the electricity system,

even if they are not *connected* to a *network* or *networks* in other *participating jurisdictions*.

9.43 Transitional arrangements for Chapter 1 - Introduction - Validity of certain actions taken prior to Transition Date

If:

- (a) the *AEMC*, the *AER*, *NEMMCO*, any *Rules body*, any *Registered Participant*, the *Tasmanian Electricity Regulator* or any *Tasmanian Code Participant* takes any action to enable any entity to perform functions under, or obligations imposed by, a provision of the *Rules* before the *Transition Date* in anticipation of the relevant provision applying in Tasmania on the *Transition Date*; and
- (b) the action was taken so far as reasonably practicable in accordance with the provision (as though the provision applied in Tasmania at the time the relevant action was taken),

then the action is deemed to have been validly taken in accordance with that provision with effect on and from the *Transition Date*. For the avoidance of doubt:

- (c) any action taken for the purposes of this clause 9.43 by the *Tasmanian Electricity Regulator* prior to the *Transition Date* to enable the *Jurisdictional Regulator* to perform functions under, or obligations imposed by, a provision of the *Rules* in anticipation of that provision coming into effect on the *Transition Date* is deemed to have been taken by the *Jurisdictional Regulator*; and

- (d) the *AEMC*, the *AER*, *NEMMCO*, any *Rules body* or other person (“Recipient”) may treat any submission, application, approval, statement or document (“application”) given to it by a person in anticipation of a provision of the *Rules* applying in Tasmania as having been given to the Recipient under that provision of the *Rules* and may take action under the *Rules* on the basis of that application or taking into account that application.

9.44 Transitional arrangements for Chapter 2 – Registered Participants and Registration - Customers (clause 2.3.1(e))

For the purposes of clause 2.3.1(e), and for the purposes of clause 2.4.2(b) in so far as it relates to *Customers*, a person satisfies the requirements of Tasmania for classification of a *connection point* of that person if that person is the holder of a *Retail Licence* or is a contestable customer within the meaning of the *ESI Act* in respect of that *connection point*.

9.45 Transitional arrangements for Chapter 3 - Market Rules

9.45.1 Tasmanian Region (clause 3.5)

- (a) Notwithstanding clause 3.5, the State of Tasmania is, and must be, one *region* and that *region* must not include any areas which fall outside of the State of Tasmania.
- (b) Notwithstanding clause 3.5.1(c), the *regional reference node* for the Tasmanian *region* is the 220kV *busbar* located at the *George Town Substation*.
- (c) Clauses 9.45.1(a) and (b) cease to have effect from the beginning of the *Third Tranche Commencement Date*.

9.45.2 Administered Price Cap (clause 3.14.1)

Until a different *administered price cap* is developed, authorised and published in accordance with clause 3.14.1(a) for the Tasmanian *region*, the administered price cap for the Tasmanian region is:

- (1) \$100/MWh between 7.00 am and 11.00 pm on a *business day*; and
- (2) \$50/MWh at all other times.

9.45.3 Settlement Residue Auctions (clause 3.18.1)

- (a) To avoid doubt, *Basslink* is not a *directional interconnector* for the purposes of clause 3.18.
- (b) Clause 9.45.3(a) ceases to have effect at the end of the second anniversary of the *Transition Date*.

9.46 Transitional arrangements for Chapter 4 - Power System Security

9.46.1 Satisfactory Operating State (clause 4.2.2)

If the *frequency* at a *busbar* located in Tasmania is within the containment range for a load event as specified in the *Tasmanian Determination on Power System Frequency Operating Standards*, then that *frequency* will be taken to be within:

- (1) the *normal operating frequency excursion band* for the purposes of the *Rules*; and
- (2) any *frequency band* (whatever it is called) specified in or under the *Rules* or the *power system security and reliability standards* which is applied by *NEMMCO* or any other person for a similar purpose as the *normal operating frequency excursion band* is applied under clause 4.2.2(a).

9.46.2 Secure operating state and power system security (clause 4.2.6(c))

In applying the *power system security* principle specified in clause 4.2.6(c) in relation to Tasmania, *NEMMCO* must have regard to the *power frequency bands* specified in the *Tasmanian Determination on Power System Frequency Operating Standards* in substitution for the *frequency bands* contemplated by that clause.

9.46.3 Market Customer obligations (clause 4.3.5(b))

Notwithstanding clause 4.3.5(b), *Market Customers* must provide their *interruptible load* in respect of *connection points* located in Tasmania in manageable blocks spread over a number of steps within under-*frequency bands* down to the lower limit of the “extreme frequency excursion tolerance limits” (as specified in the *Tasmanian Determination on Power System Frequency Operating Standards*) and not 47.0Hz as specified in clause 4.3.5(b).

9.46.4 Power System Frequency Control Responsibilities (clause 4.4.1)

Notwithstanding clause 4.4.1 and the *power system security and reliability standards*, *NEMMCO* must use reasonable endeavours to ensure that, in Tasmania, the *frequency levels* specified in the *Tasmanian Determination on Power System Frequency Operating Standards* are achieved.

9.47 Transitional arrangements for Chapter 5- Network Connection

9.47.1 Existing Connection Agreements

The following agreements are each to be taken to be a *connection agreement* for the purposes of clause 5.2:

- (a) the Connection Agreement dated 1 July 1998 between *Aurora* and *Hydro Tasmania*;
- (b) the Connection and Network Services Agreement dated 1 July 1998 between *Transend* and *Aurora*;
- (c) the Connection and Network Services Agreement dated 1 July 1998 between *Transend* and *Hydro Tasmania*;
- (d) the Basslink Connection Agreement dated 28 January 2000 between National Grid International Limited and *Transend*; and
- (e) any other connection agreement entered into prior to the *Transition Date* in accordance with the *Tasmanian Code*.

9.47.2 [Deleted]

9.47.3 Frequency variations (clauses S5.1.3 and S5.1.10)

In performing the functions contemplated by clauses S5.1.3 and S5.1.10 of schedule 5.1 of the *Rules* in relation to that part of the *power system* located in Tasmania, *NEMMCO* and *Tasmanian Network Service Providers* must apply the *power system frequency bands* specified in the *Tasmanian Determination on Power System Frequency Operating Standards* in Tasmania in substitution for the *frequency bands* specified in the *power system security and reliability standards*.

9.47.4 Fault clearance times (clauses S5.1.9 and S5.1a.8 and table S5.1a.2)

- (a) Notwithstanding clause S5.1.9 of schedule 5.1 of the *Rules* and clause S5.1a.8, and table S5.1a.2, of schedule 5.1a of the *Rules*, if:
 - (1) there is no system for communication between the faulted end and the remote end of a power line located in Tasmania; or
 - (2) there is a maintenance *outage* of the system for communication between the faulted end and the remote end of a power line located in Tasmania,

then the remote end maximum *fault clearance time* in respect of that power line is 600 milliseconds.

- (b) Notwithstanding clause S5.1.9 of schedule 5.1 of the *Rules* and clause S5.1a.8, and table S5.1a.2, of schedule 5.1a of the *Rules*, if there is no circuit breaker failure protection in respect of a power line located in Tasmania, then the breaker fail maximum *fault clearance time* for that line is 1100 milliseconds.
- (c) Clauses 9.47.4(a) and (b) cease to have effect at the end of the first anniversary of the *Transition Date*.

9.48 Transitional arrangements for Chapter 6 - Transmission and Distribution Pricing

9.48.1 [Deleted]

9.48.2 Transmission Service Pricing

- (a) A "Pre-NEM Determination" is a determination, decision or ruling made or set by the *ACCC* which:
 - (1) is made under any of the *ESI Act*, the *Price Control Regulations* or the *Tasmanian Code* (together called the "Tasmanian regulatory regime");
 - (2) relates to or is connected with transmission pricing (including, without limitation, a determination, decision or ruling relating to the setting or re-setting of a revenue cap);
 - (3) is made prior to the *Transition Date*, but applies until a date which falls after the *Transition Date*; and
 - (4) is equivalent to or has substantially the same effect as a determination, decision or ruling ("Equivalent Determination") which the *AER* may make or set under the *Rules* or which is contemplated by the *Rules*.
- (b) Subject to clause 9.48.2(d), a Pre-NEM Determination is:
 - (1) deemed to have been validly made or set under the *Rules* in accordance with any procedures or steps which apply to the making of an Equivalent Determination; and
 - (2) deemed to be an Equivalent Determination under the *Rules*.
- (c) Subject to clause 9.48.2(d), any action taken by a *Tasmanian Code Participant* as a result of, or to implement or following a Pre-NEM Determination under the Tasmanian regulatory regime in accordance with the instruments comprising that regime is deemed to have been validly taken in accordance with the *Rules*.
- (d) If, at any time after the *Transition Date*, it appears to the *AER* that:

- (1) a Pre-NEM Determination or action referred to in clause 9.48.2(c) is inconsistent with the relevant principles in the *Rules* in a material way; and
- (2) the inconsistency is due to a material difference between the Tasmanian regulatory regime and the *Rules* or the *National Electricity Code* (in the form the instruments comprising that regime and the *Rules* or the *National Electricity Code* (as the case may be) were in at the time of the Pre-NEM Determination or action),

then the *AER* may re-open the Pre-NEM Determination or disallow the action by written notice to the *Minister*. A notice under this clause 9.48.2(d) must set out a summary of the reasons why the *AER* is giving the notice. Clause 9.48.2(b) or (c) (as applicable) ceases to apply to a Pre-NEM Determination or action the subject of a notice under this clause 9.48.2(d) from the time specified in the notice.

- (e) To avoid doubt, the *AER* may make or set a determination, decision or ruling in accordance with the *Rules* that replaces a Pre-NEM Determination re-opened under clause 9.48.2(d).
- (f) **[Deleted]**
- (g) If:
 - (1) Chapter 6 of the *National Electricity Code* was amended after 22 November 2000 and before the *Transition Date* or Chapter 6 of the *Rules* is amended before the *Transition Date*;
 - (2) those amendments contemplate a change in the allocation of costs amongst users of *transmission networks*; and
 - (3) those amendments contemplate transitional arrangements for the phasing in of that change,

then equivalent transitional arrangements also apply to users of *transmission networks* located in Tasmania, and the prices which apply immediately before the *Transition Date* are the starting point for the phase-in.

9.48.3 Distribution Service Pricing – Jurisdictional Regulator

- (a) The *Tasmanian Electricity Regulator* remains *Jurisdictional Regulator* for Tasmania until the Tasmanian Minister makes a transfer of regulatory responsibility to the *AER* under clause 11.14.4.
- (b) This clause expires on 1 July 2012 or an earlier date fixed by the Tasmanian Minister and notified in the Tasmanian Government Gazette.

9.48.4 Distribution Service Pricing

- (a) For the purposes of clause 11.14.3(a), but subject to clauses 11.14.3, 11.14.4 and 11.14.6, the regulation of *distribution service* pricing for any *distribution network* situated in Tasmania must be in accordance with the *ESI Act* and the *Tasmanian Code* to the exclusion of provisions or former provisions of these Rules that would otherwise be applicable.
- (b) This clause expires on 1 July 2012 or an earlier date fixed by the Tasmanian Minister and notified in the Tasmanian Government Gazette.

9.48.4A Ring fencing

On the *AER's* assumption of responsibility for the economic regulation of *distribution services* in Tasmania, the following guidelines (as amended or substituted from time to time) will be taken to be distribution ring-fencing guidelines issued by the *AER* under Rule 6.17:

- (1) *Guideline for Ring-fencing in the Tasmanian Electricity Supply Industry* (dated October 2004); and
- (2) *Electricity Distribution and Retail Accounting Ring-fencing Guidelines: Electricity Guideline No 2.2, Issue No 3, May 2005.*

Note:

The AER will assume responsibility for the economic regulation of distribution services on the transfer of regulatory responsibility under clause 11.14.4.

9.48.4B Uniformity of tariffs for small customers

- (a) In making a distribution determination or approving a *pricing proposal* for a Tasmanian *Distribution Network Service Provider*, the *AER* must ensure that distribution tariffs for small customers of a particular class are uniform regardless of where in mainland Tasmania the customer is supplied with electricity.
- (b) In this clause, *small customer* has the same meaning as in regulations under the *Electricity Supply Industry Act 1995* (Tas).

9.48.5 Transmission network

For the purpose of the *Rules*, a *network* operating at "extra high voltage" (as that term is defined in the *ESI Act*) is deemed to be a *transmission network*.

9.48.6 Deemed regulated interconnector

For the purposes of the *Rules*, any *interconnector* between *regions* in Tasmania in existence when those *regions* are established, to the extent that it forms part of the *power system* in Tasmania, is deemed to be a *regulated interconnector*.

9.49 Transitional arrangements for Chapter 8 - Administrative Functions

9.49.1 Frequency Standards (clause 8.8.1)

Notwithstanding anything else in the *Rules*, but subject to the other provisions of this Part F:

- (a) on and from the *Transition Date* until the start of the *Interconnection Date*, the *power system security and reliability standards* applicable in Tasmania are the *Tasmanian power system security and reliability standards* and not those determined by the *Reliability Panel* under clause 8.8;
- (b) on and from the *Interconnection Date* until the end of the second anniversary of the *Transition Date*, the standards governing *frequency* in respect of that part of the *power system* located in Tasmania are those set out in the *Tasmanian Determination on Power System Frequency Operating Standards* and not those in the *power system security and reliability standards* or applying elsewhere in or under the *Rules*; and
- (c) after the second anniversary of the *Transition Date*, the standards governing *frequency* in respect of that part of the *power system* located in Tasmania are those set out in the *power system security and reliability standards* determined as contemplated in clause 9.49.3 and not those in any other set of standards or applying elsewhere in or under the *Rules*,

and provisions of the *Rules* referring to or relating to *frequency*, *frequency operating standards*, *frequency bands*, *frequency ranges* or *frequency limits* must be interpreted accordingly.

9.49.2 Termination of frequency derogations

Clauses 9.46.1, 9.46.2, 9.46.3, 9.46.4 and 9.47.3 cease to have effect from the end of the second anniversary of the *Transition Date*.

9.49.3 Reliability Panel

Before the first anniversary of the *Transition Date*, the *Reliability Panel* must determine *power system security and reliability standards* under clause 8.8 that, in so far as they apply in respect of Tasmania, reflect the principles set out in clause 9.49.4.

9.49.4 Principles to be applied by Reliability Panel

In determining and amending *power system security and reliability standards* the *Reliability Panel* must ensure that, in so far as they apply in respect of Tasmania, those standards reflect the following principles:

- (a) in so far as they relate to *frequency*, such standards must be made having regard to the following:
 - (1) any existing standards in relation to those matters;
 - (2) the costs and benefits of any change proposed to those existing standards; and
 - (3) the size and characteristics of the separate systems that make up the *power system*;
- (b) where the *network* or *networks* located in a particular area or *region* in Tasmania is or are only *connected* to other areas or *regions* by means of an asynchronous link, the *power system security and reliability standards*, in so far as they relate to *frequency*, may incorporate different standards for the first area or *region* to those applying elsewhere in the *power system*; and
- (c) the *power system security and reliability standards*, in so far as they relate to *frequency*, must allow less stringent standards for the *frequency* of a *network* or *networks* located in a particular area or *region* in Tasmania when that area or *region* is isolated from the remainder of the *power system*.

Part G - Schedules to Chapter 9

Schedule 9G1 - Metering Transitional Arrangements

1. Introduction

- (a) The following minimum requirements apply in respect of *metering installations* commissioned before 13 December 1998.
- (b) [Deleted]

2. [Deleted]

3. General Principle

The general principle is that *meters* are required and a *metering installation(s)* capable of recording half-hour *energy* flows and of providing electronic data for transfer to the *metering database* is to be in place for each *Market Participant's connection point(s)* before the *Market Participant* is permitted to participate in the *market*, and there will be no relaxation of this principle in the *jurisdictional derogations*.

4. [Deleted]

5. Accuracy Requirements

5.1 Existing Metering Installations Transitional Exemptions

In addition to those allowances in clause S7.2.2 of schedule 7.2 - "Metering installations commissioned prior to 13 December 1998", the following conditions/exemptions apply:

- (a) For *Generators*, *generated* quantities together with estimates for *generating unit* auxiliary loads may be used provided there is an agreed method with *NEMMCO* for determining *sent-out* energy. [refer to clause 7.3.2]
- (b) The *check metering* requirements of the *Rules* do not have to be met for Type 1 *metering installations*. A minimum of partial *check metering* is required for Types 1 and 2 *metering installations*. [refer to clause S7.2.4 of schedule 7.2 of Chapter 7]
- (c) Joint use of secondary circuits for *revenue metering* is permitted for Type 1 *metering installations*. [refer to cl.S7.2.6.1(a) of schedule 7.2 of Chapter 7]

- 5.2** [Deleted]
- 6.** [Deleted]
- 7.** [Deleted]
- 8.** [Deleted]
- 9.** [Deleted]
- 10.** [Deleted]

CHAPTER 10



10. GLOSSARY

AARR

The *aggregate annual revenue requirement for prescribed transmission services*.

abnormal conditions

A condition described in clause 4.2.3A(a).

~~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

For a *Transmission Network Service Provider* - an amount described in clause 5.4A(g)-(j).

For a *Distribution Network Service Provider* - in respect of access to:

- (a) *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c), an amount described in clause 5.5(f)(4); and

- (b) *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c), an amount described in clause 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*.

activate, activated, activation

The operation of a *generating unit* (other than a *scheduled generating unit*) at an increased *loading level* or reduction in demand (other than a *scheduled load*) undertaken in response to a request by NEMMCO in accordance with an *unscheduled reserve contract*.

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 watt-hour (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 3.12.2(k).

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.

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 3.12.2(g)(3).

Affected Participant

- (a) In respect of a particular *direction* in an *intervention price trading interval*:
- (1) a *Scheduled Generator* or *Scheduled Network Service Provider*:
 - (i) which was not the subject of the *direction*, that had its *dispatched* quantity affected by that *direction*; or
 - (ii) which was the subject of the *direction*, that had its *dispatched* quantity for other *generating units* or other services which were not the subject of that *direction* affected by that *direction*, however, the *Scheduled Generator* 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
 - (2) 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*; and
- (b) in relation to the exercise of the *RERT* under rule 3.20:
- (1) a *Scheduled Generator* or *Scheduled Network Service Provider*:
 - (i) whose *plant* or *scheduled network service* was not *dispatched* under a *scheduled reserve contract*, that had its *dispatched* quantity affected by the *dispatch* of *plant* or *scheduled network service* under that *scheduled reserve contract*; and
 - (ii) who was not the subject of *activation* under an *unscheduled reserve contract*, that had its *dispatched* quantity affected by the *activation* of *generating units* or *loads* under that *unscheduled reserve contract*;
 - (2) a *Scheduled Generator* or *Scheduled Network Service Provider* whose *plant* or *scheduled network service* was *dispatched* under a *scheduled reserve contract*, that had its *dispatched* quantity for other *generating units* or other services which were not *dispatched* under the *scheduled reserve contract* affected by that *dispatch* of *plant* or *scheduled network service* under that *scheduled reserve contract*, however, the *Scheduled Generator* or *Scheduled Network Service Provider* is only an *Affected Participant* in respect of those *generating units* and services which were not *dispatched* under that *scheduled 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 *dispatch* of *plant* or *scheduled network service* under a *scheduled reserve contract* or the *activation* of *generating units* or *loads* under an *unscheduled 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*.

alternative control service

A *distribution service* that is a *direct control service* but not a *standard control service*.

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 revenue requirement

An amount representing revenue for a *Distribution Network Service Provider*, for each *regulatory year* of a *regulatory control period*, calculated in accordance with Part C of Chapter 6.

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) Queensland:
 - (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 QCA 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.

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

- (a) the amount the *AER* determines should be passed through to *Distribution Network Users* under clause 6.6.1(d)(2); or
- (b) the amount the *AER* is taken to have determined under clause 6.6.1(e)(3),
as the case may be.

approved pricing proposal

A pricing proposal approved by the AER.

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.

building block determination

The component of a distribution determination relevant to the regulation of *standard control services* (See rule 6.3).

building block proposal

For a *Distribution Network Service Provider*, the part of the provider's *regulatory proposal* relevant to the regulation of *standard control services* (See clause 6.3.1).

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

For a *Transmission Network Service Provider* – the matters listed in clause 6A.6.7(c)(1)–(3).

For a *Distribution Network Service Provider* – the matters listed in clause 6.5.7(c)(1)–(3).

capital expenditure factors

For a *Transmission Network Service Provider* – the factors listed in clause 6A.6.7(e)(1)–(10).

For a *Distribution Network Service Provider* – the factors listed in clause 6.5.7(e)(1)–(10).

capital expenditure objectives

For a *Transmission Network Service Provider* – the objectives set out in clause 6A.6.7(a).

For a *Distribution Network Service Provider* – the objectives set out in clause 6.5.7(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.

charging parameters

The constituent elements of a tariff.

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

For a *Transmission Network Service Provider* – the guidelines referred to in clause 6A.19.3.

For a *Distribution Network Service Provider* – the guidelines referred to in clause 6.15.3.

Cost Allocation Method

For a *Distribution Network Service Provider*, the Cost Allocation Method approved by the AER for that *Distribution Network Service Provider* under clause 6.15.4(c) and (d) as amended from time to time in accordance with clause 6.15.4(f) and (g).

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

For a *Transmission Network Service Provider* – the principles set out in clause 6A.19.2.

For a *Distribution Network Service Provider* – the principles set out in clause 6.15.2.

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.

demand management incentive scheme

An incentive scheme for certain *Distribution Network Service Providers* developed and *published* by the AER under clause 6.6.3.

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.

direct control service

A *distribution service* that is a direct control network service within the meaning of section 2B of the Law.

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 *scheduled reserve contract* in accordance with rule 3.20 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 consultation procedures

The procedures set out in Part G of Chapter 6.

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

The guidelines developed by the AER under clause 6.17.2.

distribution service

A service provided by means of, or in connection with, a distribution system.

distribution services access dispute

A dispute referred to in clause 6.22.1.

distribution standard control service revenue

Has the meaning given in rule 6.26(b)(2).

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*.

dual function asset

Means any part of a *network* owned, operated or controlled by a *Distribution Network Service Provider* which operates between 66 kV and 220 kV and which operates in parallel, and provides support, to the higher voltage *transmission network* which is deemed by clause 6.24.2(a) to be a *dual function asset*. For the avoidance of doubt:

- (a) a *dual function asset* can only be an asset which forms part of a *network* that is predominantly a *distribution network*; and
- (b) an asset which forms part of a *network* which is predominantly a *transmission network* cannot be characterised as a *dual function asset*,

through the operation of clause 6.24.2(a).

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.

EAAP guidelines

The guidelines *published* by *NEMMCO* in accordance with clause 3.7C(k) that *NEMMCO* must comply with in preparing the *EAAP*.

EAAP principles

The principles referred to in clause 3.7C(b) that *NEMMCO* must comply with in preparing the *EAAP* and the *EAAP guidelines*.

Eastern Standard Time (EST)

The time which is set at 10 hours in advance of *Co-ordinated Universal Time*.

efficiency benefit sharing scheme

For a *Transmission Network Service Provider* – a scheme developed and *published* by the *AER* under clause 6A.5.

For a *Distribution Network Service Provider* – a scheme developed and *published* by the *AER* under clause 6.5.8.

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).

In respect of a *positive change event* for a *Distribution Network Service Provider*, the increase in costs in the provision of *direct control services* that the *Distribution 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 adequacy assessment projection (EAAP)

A projection of *NEMMCO*'s assessment of *energy* availability that accounts for *energy constraints* for each month over a 24 month period, which is prepared and *published* in accordance with rule 3.7C and is measured as *unserved energy* for each *region*.

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 constraint

A limitation on the ability of a *generating unit* or group of *generating units* to generate *active power* due to the restrictions in the availability of fuel or other necessary expendable resources such as, but not limited to, gas, coal, or water for operating turbines or for cooling.

energy conversion model

The model that defines how the *intermittent* input energy source (such as wind) is converted by the *semi-scheduled generating unit* into electrical output. That model must contain the information set out in the guidelines *published* by NEMMCO in accordance with clause 2.2.7(d).

energy data

Interval energy data or *accumulated energy 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).

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.

framework and approach paper

A document prepared and issued as a framework and approach paper under clause 6.8.1.

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.

GELF parameters

Variable parameters specific to a *Generator Energy Limitation Framework (GELF)* which are defined in the *EAAP guidelines* and supplement the *GELF*, and are submitted by a *Scheduled Generator* and updated in accordance with rule 3.7C for the purpose of the *EAAP*.

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) Subject to paragraph (b), for the purposes of the *Rules*, a system comprising one or more *generating units*.
- (b) For the purposes of clause 2.2.1(e)(3), clause 4.9.2, Chapter 5 and a *jurisdictional derogation* from Chapter 5, 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 Energy Limitation Framework (GELF)

A description of the *energy constraints* that affect the ability of a *scheduled generating unit* to generate electricity prepared in accordance with the *EAAP guidelines*.

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 6 or 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 or Chapter 6A, a person (not being a *Registered Participant* or *NEMMCO*) that has, in the *AER's* opinion, or identifies itself to the *AER* as having, an interest in the *Transmission Ring-Fencing Guidelines* or the *Distribution Ring-Fencing 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 3.12.1(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 except load under the control of underfrequency relays as described in clause S5.1.10.1(a), or a scheduled load.

~~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 the authority responsible for administering the *jurisdictional electricity legislation* in the relevant *participating jurisdiction*.

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 authority responsible for administering the *jurisdictional electricity legislation* in the relevant *participating jurisdiction*.

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 3.12.2(g)(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 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

- (b) 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*. In other contexts, the word has its ordinary meaning.

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 electricity objective

The objective stated in section 7 of the 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.

For a *Distribution Network Service Provider*, a *pass through event* that materially reduces the costs of providing *direct control services*.

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).

In respect of a *negative change event* for a *Distribution Network Service Provider*, an amount that is not greater than a *required pass through amount* as determined by the *AER* under clause 6.6.1(g).

negotiable service

- (a) In relation to *transmission services* means *negotiated transmission services*.
- (b) In relation to *distribution services* means *negotiated distribution services*.

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 distribution service

A *distribution service* that is a *negotiated network service* within the meaning of section 2C of the Law;

Negotiated Distribution Service Criteria

The criteria specified in a distribution determination in accordance with clause 6.7.4.

Negotiated Distribution Service Principles

The principles set out in clause 6.7.1.

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).

For a *Distribution Network Service Provider*, a negotiating framework as approved or substituted by the *AER* in its final decision under clause 6.12.1(15).

NEM

The *National Electricity Market*.

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 intervention event

An event where *NEMMCO* intervenes in the *market* under the *Rules* by:

- (a) issuing a *direction* in accordance with clause 4.8.9; or
- (b) exercising the *reliability and emergency reserve trader* in accordance with rule 3.20 by:
 - (1) *dispatching scheduled generating units, scheduled network services or scheduled loads* in accordance with a *scheduled reserve contract*; or
 - (2) *activating loads or generating units* under an *unscheduled reserve contract*.

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*.

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 service provider performance report

A report prepared by the AER under section 28V of the Law.

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 *AER* 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 *AER* 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

For a *Transmission Network Service Provider* – the matters listed in clause 6A.6.6(c)(1)–(3).

For a *Distribution Network Service Provider* – the matters listed in clause 6.5.6(c)(1)–(3).

operating expenditure factors

For a *Transmission Network Service Provider* – the factors listed in clause 6A.6.6(e)(1)–(10).

For a *Distribution Network Service Provider* – the factors listed in clause 6.5.6(e)(1)–(10).

operating expenditure objectives

For a *Transmission Network Service Provider* – the objectives set out in clause 6A.6.6(a).

For a *Distribution Network Service Provider* – the objectives set out in clause 6.5.6(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 is a pass through event:

- (a) a regulatory change event;
- (b) a service standard event;
- (c) a tax change event;
- (d) a terrorism event.

An *insurance event* is a pass through event for a *transmission determination* (in addition to those listed above).

An event nominated in a distribution determination as a pass through event is a pass through event for the determination (in addition to those listed above).

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*.

For a *Distribution Network Service Provider*, a *pass through event* that materially increases the costs of providing *direct control services*.

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

For a *Transmission Network Service Provider*, an amount (not exceeding the *eligible pass through amount*) proposed by the provider under clause 6A.7.3(c).

For a *Distribution Network Service Provider*, an amount (not exceeding the *eligible pass through amount*) proposed by the provider under clause 6.6.1(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

For a *Transmission Network Service Provider*, the model prepared and *published* by the *AER* in accordance with clause 6A.5.1.

For a *Distribution Network Service Provider*, the model prepared and *published* by the *AER* in accordance with clause 6.4.1.

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 *scheduled 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 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.

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 proposal

A pricing proposal under Part I of Chapter 6.

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 document is published by the *AER* if it is:

- (a) published on the *AER*'s website; and
- (b) made available for public inspection at the *AER*'s public offices; and
- (c) in the case of a document inviting submissions from members of the public – published in a newspaper circulating generally throughout Australia.

A document is published by someone else if it is made 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 3.12.2(l) or 3.12.2(m).

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 3.12.2(l) or 3.12.2(m).

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.

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 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.

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 change event

A change in a *regulatory obligation* or *requirement* that:

- (a) falls within no other category of *pass through event*; and
- (b) occurs during the course of a *regulatory control period*; and
- (c) substantially affects the manner in which the *Transmission Network Service Provider* provides *prescribed transmission services* or the *Distribution Network Service Provider* provides *direct control services* (as the case requires); and
- (d) *materially* increases or *materially* decreases the costs of providing those services.

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 of not less than 5 *regulatory years* for which the provider is subject to a control mechanism imposed by a distribution determination.

regulatory obligation or requirement

Has the meaning assigned in the Law.

regulatory proposal

A proposal (by a *Distribution Network Service Provider*) under rule 6.8.

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 NEMMCO intervention event

A *NEMMCO intervention event* that involves the exercise of the *reliability and emergency reserve trader* in accordance with rule 3.20 as referred to in paragraph (b) of the definition of *NEMMCO intervention event*.

relevant tax

Any tax payable by a *Transmission Network Service Provider* or a *Distribution 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 and emergency reserve trader (RERT)

The actions taken by *NEMMCO* as referred to in clause 3.20.2, in accordance with rule 3.20, to ensure reliability of *supply*.

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*.

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).

In respect of a *negative change event* for a *Distribution Network Service Provider*, the costs in the provision of *direct control services* that the *Distribution Network Service Provider* has saved and is likely to save up to the end of the *regulatory control period* as a result of the *negative change event* (as opposed to the revenue impact of that event).

RERT guidelines

The guidelines developed and *published* by the *Reliability Panel* under clause 3.20.8.

RERT principles

The principles referred to in clause 3.20.2(b).

reserve

Scheduled reserve or *unscheduled reserve*.

reserve contract

A *scheduled reserve contract* or an *unscheduled reserve contract*.

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 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

According to context:

- (a) 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;
- (b) the model developed and published by the *AER* for the roll forward of the regulatory asset base for *distribution systems* in accordance with clause 6.5.1.

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*, or the *ACCC*, 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) A *generating unit* so classified in accordance with Chapter 2.
- (b) For the purposes of Chapter 3 and rule 4.9, two or more *generating units* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

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) 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*.
- (b) For the purposes of Chapter 3 and rule 4.9, two or more *scheduled loads* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

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) A *network service* which is classified as a *scheduled network service* in accordance with Chapter 2.
- (b) For the purposes of Chapter 3 and rule 4.9, two or more *scheduled network services* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

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 *semi-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.

scheduled reserve

The amount of surplus or unused capacity:

- (a) of *scheduled generating units*;
- (b) of *scheduled network services*; or
- (c) arising out of the ability to reduce *scheduled loads*.

scheduled reserve contract

A contract entered into by *NEMMCO* for the provision of *scheduled reserve* in accordance with rule 3.20.

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.

semi-scheduled generating system

A *generating system* comprising *semi-scheduled generating units*.

semi-scheduled generating unit

- (a) A *generating unit* classified in accordance with clause 2.2.7.
- (b) For the purposes of Chapter 3 and rule 4.9, two or more *generating units* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

Semi-Scheduled Generator

A *Generator* in respect of which any *generating unit* is classified as a *semi-scheduled generating unit* in accordance with Chapter 2.

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

According to context:

- (a) a person who is an existing or intending *Registered Participant* or a person who is eligible to become a *Registered Participant*; or
- (b) a person who asks a *Distribution Network Service Provider* for access to a *distribution service*.

service standard event

A legislative or administrative act or decision that:

- (a) has the effect of:
 - (i) substantially varying, during the course of a *regulatory control period*, the manner in which a *Transmission Network Service Provider* is required to provide a *prescribed transmission service*, or a *Distribution Network Service Provider* is required to provide a *direct control service*; or
 - (ii) imposing, removing or varying, during the course of a *regulatory control period*, minimum service standards applicable to *prescribed transmission services* or *direct control services*; or
 - (iii) altering, during the course of a *regulatory control period*, the nature or scope of the *prescribed transmission services* or *direct control services*, provided by the service provider; and
- (b) *materially* increases or *materially* decreases the costs to the service provider of providing *prescribed transmission services* or *direct control services*.

service target performance incentive scheme

A For a *Transmission Network Service Provider* – a scheme developed and *published* by the AER in accordance with clause 6A.7.4.

For a *Distribution Network Service Provider* – a scheme developed and *published* by the AER in accordance with clause 6.6.2.

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 distribution service

A service provided to a *Distribution Network User* for use of a *distribution network* for the conveyance of electricity (including a service that ensures the integrity of the related *distribution system*).

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(e).~~

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 *scheduled 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*.

standard control service

A *direct control service* that is subject to a control mechanism based on a *Distribution Network Service Provider's total revenue requirement*.

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*, *Semi-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*.

statement of regulatory intent

A statement issued by the *AER* under clause 6.5.4(c).

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 condensers

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*.

tariff class

A class of customers for one or more *direct control services* who are subject to a particular tariff or particular tariffs.

tax

Any tax, levy, impost, deduction, charge, rate, rebate, duty, fee or withholding which is levied or imposed by an *Authority*.

tax change event

A tax change event occurs if:

- (a) any of the following occurs during the course of a *regulatory control period* for a *Transmission Network Service Provider* or a *Distribution Network Service Provider*:
 - (i) a change in a *relevant tax*, in the application or official interpretation of a *relevant tax*, in the rate of a *relevant tax*, or in the way a *relevant tax* is calculated;
 - (ii) the removal of a *relevant tax*;
 - (iii) the imposition of a *relevant tax*; and

- (b) in consequence, the costs to the service provider of providing *prescribed transmission services* or *direct control services* are materially increased or decreased.

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

According to context:

- (a) the terms and conditions described in clause 6A.1.2 (access to transmission services);
- (b) the terms and conditions described in clause 6.1.3 (access to *distribution services*).

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 *materially* increases the costs to a *Transmission Network Service Provider* of providing *prescribed transmission services* or the costs to a *Distribution Network Service Provider* of providing *direct control services*.

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*.

total revenue requirement

For a *Distribution Network Service Provider*, an amount representing revenue calculated for the whole of a *regulatory control period* in accordance with Part C of Chapter 6.

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 standard control service

Has the meaning given in rule 6.25(a).

transmission standard control service revenue

Has the meaning given in rule 6.26(b)(1).

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.

unscheduled reserve

The amount of surplus or unused capacity:

- (a) of *generating units* (other than *scheduled generating units*); or
- (b) arising out of the ability to reduce demand (other than a *scheduled load*).

unscheduled reserve contract

A contract entered into by *NEMMCO* for the provision of *unscheduled reserve* in accordance with rule 3.20.

unserved energy

The amount of *energy* that is demanded, but cannot be supplied, in a *region* and which is defined in accordance with the *power system security and reliability standards* and is expressed as:

- (a) GWh; or
- (b) a percentage of the total *energy* demanded in that *region* over a specific period of time such as a year.

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.

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.

For a *Distribution Network Service Provider* for a *regulatory control period*, the return on capital for that *Distribution Network Service Provider* for that *regulatory control period* calculated in accordance with clause 6.5.2.