# **Independent Market Operator**

## IMO PROCEDURE CHANGE AND DEVELOPMENT GROUP

# Agenda

Meeting No.	6
Location:	IMO Board Room,
	Level 3, Governor Stirling Tower, 197 St Georges Terrace, Perth
Date:	Tuesday 27 July 2010
Time:	Commencing at 3.00 to 5:00pm

Item	Subject	Responsible	Time
1.	WELCOME AND APOLOGIES / ATTENDANCE	Chair	2 min
2.	MINUTES OF PREVIOUS MEETING	Chair	5 min
3.	ACTIONS ARISING	Chair	5 min
4.	IMO'S MARKET PROCEDURE PROJECT	IMO	10 min
5.	PC_2010_01: MARKET PROCEDURE FOR PROCEDURE ADMINISTRATION	IMO	15 min
	Updated to new IMO format.		
6.	PC_2010_02: MARKET PROCEDURE FOR NOTICE AND COMMUNICATIONS	IMO	10 min
	Updated to new IMO format.		
7.	PC_2010_03: MONITORING PROTOCOL		
	a) Updated Monitoring Protocol		
	Updated to new IMO format, to allow the IMO to disclose the identity of System Management as a participant that notifies the IMO of alleged breaches (step 2.3.8) and to reflect the change to the Amending Rules arising from RC_2010_18.	IMO	15 min

1

Item	Subject	Responsible	Time
	b) Updated and concise Monitoring Protocol		
	Updated to reflect the changes in Agenda Item 7a and revised to remove any duplication of clauses in the Market Rules.		
	Please note, the IMO will be seeking the Working Group's views on the two versions of the Monitoring Protocol. The IMO will adopt the advice for future updates of IMO Market Procedures.		
8.	PC_2010_04: MARKET PROCEDURE FOR THE DETERMINATION OF THE MAXIMUM RESERVE CAPACITY PRICE		
	Updated to reinstate the Major Component values. Please note, this procedure is in the original IMO format as there is a Working Group in place to review and update this procedure in its entirety.	IMO	15 min
9.	PC_2010_05: MARKET PROCEDURE FOR RESERVE CAPACITY PERFORMANCE MONITORING		
	Updated to new IMO format and to include the changes to the Amending Rules arising from RC_2009_19 and RC_2009_11.	IMO	5 min
	Please note, dependent on the outcome of the discussion under agenda item 7 this procedure may need additional revisions.		
10.	MARKET PROCEDURE FOR RESERVE CAPACITY SECURITY		
	Proposed changes for discussion prior to Procedure Change Proposal.	IMO	15 min
11.	GENERAL BUSINESS	IMO	5 min
12.	NEXT MEETING: 28 September 3.00pm – 5.00pm	Chair	2 min

Agenda 8 March 2007

# **Independent Market Operator**

## IMO PROCEDURE CHANGE AND DEVELOPMENT GROUP

## **Minutes**

Meeting No.	5
Location:	IMO Board Room
	Level 3, Governor Stirling Building, 197 St Georges Terrace, Perth
Date:	Thursday 22 April 2010
Time:	Commencing at 10:00 to 11:30am

Attendees		
Jacinda Papps	Independent Market Operator (IMO)	Chair
Steve Gould	Landfill Gas & Power (LGP)	Industry Representative
Alistair Butcher	System Management	System Management Representative
John Rhodes	Synergy	Synergy Representative
Wendy Ng	Verve Energy	Verve Energy Representative
Ben Williams	IMO	Presenter (10:00-11:00am)
Greg Ruthven	IMO	Presenter
Fiona Edmonds	IMO	Minutes

Apologies		
Yin Heng	Perth Energy	Industry Representative
Corey Dykstra	Alinta	Industry Representative

1

Item	Subject	Action
1.	WELCOME AND APOLOGIES / ATTENDANCE	
	The Chair opened the 5 <sup>th</sup> meeting of the IMO Procedure Change and Development Working Group (Working Group) at 10:00am.	
	Apologies were received from Yin Heng and Corey Dykstra.	
	The Chair introduced Ben Williams and Greg Ruthven as the presenters and subject matter experts for the Procedure Change Proposals on the agenda for this meeting.	
2.	MINUTES OF PREVIOUS MEETING	
	The minutes from Meeting 4 of the Working Group, held on 25 March 2009, were circulated prior to this meeting.	
	The minutes were accepted by Working Group members as a true and accurate record of the previous meeting.	
	Action Point: IMO to publish the minutes of Meeting 4 on the Website.	IMO
3.	ACTIONS ARISING	
	The actions arising were either complete or on the meeting agenda. The following exceptions were noted:	
	Market Procedure for Supplementary Reserve Capacity (SRC):	
	Item 7: The IMO to review section 2.3 and report back to the Working Group on how the Maximum Availability Price is prorated.	
	The IMO noted that this was provided to members for consideration prior to the meeting. It was agreed that this action item was now complete.	
	Item 12: The IMO to investigate the inclusion of liquidated damages and limitation of liability clauses in the proforma SRC contracts:	
	The IMO noted that this would be treated outside of the Market Procedure. System Management noted that to keep any SRC contracts attractive the IMO would need to balance the risk of becoming onerous and burdensome. It was agreed that this action item was now complete.	
	Item 14: The IMO to investigate whether Eligible Services would be included in the Dispatch Merit Order (DMO) or whether a separate SRC merit order would be provided.	
	The IMO stated that the intent is for Eligible Services to be included on the DMO and noted that currently this is being confirmed as occurring in the IMO systems. System	

Item	Subject	Action
	Management requested they be provided with the conclusions from the investigation to allow them to ensure that their systems would allow for SRC to be included on the DMO.	
	Market Procedure for Reserve Capacity Testing:	
	• <b>Item 22:</b> The IMO and System Management to discuss improvements to the verification process further out of session:	
	The IMO noted that this is outstanding and stated that it will provide the Working Group with an update of the outcomes of this discussion. The IMO noted that contingent on the outcomes of the discussions it will consider starting the Procedure Change Process again to include any additional amendments. Verve Energy noted that this is an important process and agreed with the IMO's recommended approach.	
	Market Procedure for Undertaking the LT PASA:	
	Item 32: System Management's planning engineers to review procedure and provide any feedback to the IMO.	
	System Management noted that this has been completed and that there was no additional feedback.	
	Item 34: The IMO to consider defining the definition of Long duration outage:	
	The IMO noted that this is under consideration.	
	• <b>Item 36</b> : The IMO to investigate whether there might be a number of Intermittent Loads not registered for this step:	
	The IMO noted that this is currently underway and that it would provide the Working Group with an update at the conclusion of the investigation. The IMO noted that PC_2009_11 is not contingent on the outcomes of this investigation.	
4a	POWER FACTOR AND ACCURACY OF TEMPERATURE DEPENDENT OUTPUTS (Presentation)	
	The IMO noted (at the 13 August 2009 Working Group Meeting) its intention to investigate:	
	The application of power factor to generator ratings;	
	<ul> <li>The validity of using a 0.1°C gradient calculation of the temperature dependence of a generation facility; and</li> </ul>	
	<ul> <li>The physical limits on the provision of reactive power and reactive power control.</li> </ul>	
	The IMO noted that it had engaged Sinclair Knight Merz (SKM) to undertake this work. The IMO presented the outcomes of the SKM report. A copy of the presentation is attached in Appendix 1.	

Item	Subject	Action
	The IMO noted SKM's recommendation, that to remain consistent with the requirements of the Technical Rules, the following power factors should be applied:	
	<ul> <li>Synchronous generators – most dispatchable generators: 0.8;</li> </ul>	
	<ul> <li>Induction generators – some smaller generators: 0.95; and</li> </ul>	
	Inverter generators – most wind-farms: 0.95	
	LGP queried the basis for the IMO's interest in the applicable power factor. The IMO responded that in past participants have applied for certification in MVars rather than MWs. The IMO noted that the proposed amendments to the Market Procedure for Certification of Reserve Capacity will provide the IMO a conservative option if details are not provided. The IMO noted its proposal to amend the procedure to include:	
	"If no power factor is provided, the IMO will use a power factor of 0.8 when determining the capacity of the Facility." [Appendix 2]	
	The IMO noted that while the SKM report is able to determine a 0.1°C gradient calculation of the temperature dependence of generation facilities, the report also raises questions as to the accuracy of using such a fine gradient given other possible derating factors other than temperature. The IMO noted that a number of de-rate curves provided to it by Market Participants recently have been at this level. The IMO stated the three options available to ensure reliability are:	
	<ul> <li>Reduce all output by 3% to ensure Generator can reliably produce Capacity Credit level in extreme circumstances – complex;</li> </ul>	
	<ul> <li>Design rule changes to include 3 or 4 (or more) dimensional de-rate curves to account for changes in pressure and temperature – Very complex; and</li> </ul>	
	Allow Market Participants to set their own risk levels when applying for CRC – current methodology.	
	Action Point: Working Group members to provide any comments on the proposed power factors by 20 May 2010.	Working Group
	Verve Energy noted that the use of 0.1°C would not capture metering errors. In response, the IMO noted that the Metering Code requires meter errors to be within a certain tolerance. The IMO noted that it needs to either:	·
	allow Market Participant to take this risk into account in the level of capacity credits they apply for; or	
	assume that the Meter Data is erroneous and add this tolerance onto the required level when performing Reserve Capacity testing.	

Item	Subject	Action
	Verve Energy noted that the use of 0.1°C would not take into account any degradation etc experienced with older facilities. Temperature dependence curves based on 0.1°C increments would be difficult to provide to the IMO unless a facility gets an independent consultant to test for each increment. Verve Energy noted that to test at this level of detail would be impracticable. The IMO suggested that testing a few points and interpolating these to develop the temperature dependence curves could be considered.	
	Action Point: Verve Energy to consider whether interpolating points (to 0.1°C) or rounding values would be most practicable for developing a temperature dependence curve.	Verve Energy
	LGP stated that the notion of measuring a temperature to 0.1°C is unnecessary and would result in larger calculation errors. The IMO noted that it currently uses Bureau of Meteorology data and SCADA temperature data (for a number of Verve Facilities) as this is available at 0.1°C. The IMO noted that the alternative is to not use 0.1°C but to rather round to a higher temperature (conservative approach) which would simply making passing a test harder.	
	Action Point: Working Group members to consider whether:	
	<ul> <li>use of 0.1°C data; or</li> </ul>	Working Group
	<ul> <li>rounding values to a higher required MW level for all temperatures</li> </ul>	
	is the most appropriate option for determining the temperature dependence curve for a facility and provide the IMO with comments by 20 May 2010.	
4b	MARKET PROCEDURE FOR CERTIFICATION OF RESERVE CAPACITY	
	The Chair noted that the Market Procedure for Certification of Reserve Capacity has been further updated to:	
	<ul> <li>incorporate the comments of the Working Group at the 13 August 2009 meeting;</li> </ul>	
	<ul> <li>incorporate the Amending Rules resulting for RC_2009_10 which introduced the concept of Early Certified Reserve Capacity (ECRC); and</li> </ul>	
	<ul> <li>ensure consistency with the style and format adopted by both the IMO and System Management for Market Procedures.</li> </ul>	
	The following points (along with any agreed action points) were raised by the Working Group regarding the amended Market Procedure for Certification of Reserve Capacity:	IMO
	Step 1: The IMO agreed to review the introduction to ensure	

Item	Subject	Action
	no duplicated information is contained in steps $1.1-1.5$ and amend accordingly.	
	<ul> <li>Step 1.3: LGP queried whether the purpose of the procedure should be stated at the outset. System Management noted that the IMO's approach of providing this in a separate step is consistent with the Power System Operation Procedures.</li> </ul>	
	Step 1.4.1(a): The IMO agreed to include a reference to Interruptible Loads.	
	• Step 1.4.1(a)(i) & (ii): The IMO agreed to amend to refer to Intermittent Generator. The IMO noted the potential difficulties in providing additional details of whether it is a Non-Scheduled Generator as they only grant capacity to Intermittent Generators.	
	<ul> <li>Step 1.6: The IMO agreed to include sub-section headings, in particular relating to accreditation of independent experts (step 1.6.2-4).</li> </ul>	
	Step 1.6.8: The IMO noted that the screen shot is generic.	
	<ul> <li>Step 1.8.3: The IMO agreed to remove any duplication between the statements made in this step and clarify that registration in WEMS for the purposes of certified capacity does not mean that an applicant is required to be registered as a Market Participant.</li> </ul>	
	Step 1.8.6: The IMO agreed to delete.	
	Step 1.8.8: The IMO agreed to amend as follows "Additional clarification of the some of the"	
	Step 1.8.11: The IMO agreed to amend to refer to the same period as for certification.	
	Step 1.8.12: The IMO agreed to amend to refer to Market Participants that require credits for that cycle.	
	Step 1.9.4: The IMO agreed to amend as follows " details of this the process for becoming committed can be found"	
	• Step 1.9.6: LGP noted that this section is a repetition. The IMO agreed to consider including in the Market Procedure a:	
	<ul> <li>more general section to apply for both Certification of Reserve Capacity and ECRC; and</li> </ul>	
	o glossary section.	
	<ul> <li>Step 1.9.10: The IMO agreed to amend to refer to Market Participants that require credits for that cycle.</li> </ul>	
	• Step 1.9.12: The IMO agreed to amend to refer to step 1.8 and 1.9 of the procedure.	
	Step 1.10.2: LGP noted that when a facility is considered to	

Item	Subject	Action
	be registered needs to be taken into account. The IMO agreed to consider.	
	Step 1.10.14: The IMO agreed to remove any duplication between the statements made in this step.	
	<ul> <li>Step 1.10.17: The IMO agreed to consider separating this step into two separate steps.</li> </ul>	
	<ul> <li>Step 1.10.25: System Management suggested that the other factors for consideration should be delineated. The IMO agreed to review the drafting of this step.</li> </ul>	
	<ul> <li>Step 1.11.1. The IMO agreed to amend as follows "         existing non-intermittent or intermittent generating         Facilities"</li> </ul>	
	<ul> <li>Step 1.11.4: System Management stated that this step will need amending following any changes to the Network Control Services (NCS) tendering arrangements as the IMO's transparency of existing contracts might be reduced. LGP recommended amending to refer to network constraints rather than transmission constraints. The IMO clarified that this was a requirement under clause 4.11.1(g) of the Market Rules and agreed to put this on the Rules Change Log.</li> </ul>	
	<ul> <li>Section 1.11.15: The IMO agreed to amend as follows " from 1 December up to an including 2009 or 1 October from 2010 onwards in Year 3".</li> </ul>	
	Step 1.12: The IMO agreed to include Interruptible Loads.	
	<ul> <li>Step 1.13.3: System Management noted the same comments as provided under step 1.11.4 around any changes to NCS.</li> </ul>	13
	Step 1.13.4: The IMO agreed to consider the inclusion of a consultation step with System Management.	
	<ul> <li>Step 1.13.8: The IMO agreed to amend as follows " from 4 December up to an including 2009 or 1 October from 2010 onwards in Year 3".</li> </ul>	
	Step 1.13.14: The IMO agreed to remove any duplication between the statements made in this step.	
	<ul> <li>Step 1.14.3: The IMO to consider including a step stating a Market Participant must submit a report in either section 1.8 or 1.9.</li> </ul>	
	<ul> <li>Step 1.14.4 &amp; 5: The IMO to consider whether there should be step referring to NCS included (similar to step 1.11.4).</li> </ul>	
	<ul> <li>Step 1.14.12: The IMO agreed to amend as follows " for a new Intermittent Generator is zero."</li> </ul>	
_	Step 1.15: The IMO agreed to include Interruptible Loads.	

Item	Subject	Action
	Step 1.15.7: The IMO agreed to amend to "Reserve Capacity Rreduction" and include a cross reference to the registration requirements.	
	<ul> <li>Appendix A: Generator Capability: The IMO agreed to consider amending to apply for only new facilities (contingent on the further comments received by Working Group members on the appropriate power factor).</li> </ul>	
5	MARKET PROCEDURE FOR SUPPLEMENTARY RESERVE CAPACITY	
	The Chair noted that the Market Procedure for Supplementary Reserve Capacity (SRC) has been updated to incorporate the comments of the Working Group at the 13 August 2009 meeting. The Chair noted that there are a number of areas of the Market Rules regarding SRC which members may not necessarily agree with, however the mandate of the Working Group precludes review of the Market Rules. In particular, the Chair noted that Working Group members are required to discuss whether the Market Procedure is consistent with the Market Rules.	
	The Chair noted that the further issues surrounding SRC, as agreed by the MAC at the February 2010 meeting, will be presented back to the MAC for further reconsideration in October 2010.	
	The IMO presented an overview of the further updates to the Working Group. The following points were noted:	
	Step 2.1: Synergy noted that there was no obligation on the IMO to publish the shortfall. The IMO clarified that this would be provided in the call for tender.	
	Step 2.3.2: System Management queried why the Value of Lost Load (VoLL) was linked to the National Electricity Market (NEM). The IMO responded that capacity may need to be encouraged from the Eastern States and would need to be competitive with NEM prices.	
	Synergy noted that the VoLL needs to only be high enough to generate a reallocation of existing capacity in Western Australia to achieve an outcome. This contrasts with the approach required in the NEM where VoLL prices need to be high enough to encourage new capacity.	
	LGP noted that the maximum price offered to providers of SRC need to reflect the value of the additional capacity to the market. Additionally, LGP noted that the maximum is likely to be the price which providers offer in to the IMO at. System Management queried whether the NEM's VoLL would be too high a price.	
	Verve Energy noted that theoretically the appropriate price would be our maximum energy price as all existing capacity would have already been paid for by the market.	
	The Working Group agreed that there is not a sufficient link	

Item	Subject	Action
	between the VoLL in the NEM and the prices required to encourage the provision of SRC in Western Australia.	
	Action Point: The IMO to consider an appropriate alternative to the use of the VoLL from the NEM for determining the Maximum Contract Value.	IMO
	The IMO noted that the decision over which methodology would be utilised would be escalated to the IMO Board. Additionally, the IMO clarified that it would retain the option of specifying a cap on the availability price.	
	Synergy noted that to get a better feel for whether the methodology for determining the Maximum Contract Value is appropriate it would need to consider the details of the SRC contract.	
	Action Point: The IMO to consider whether it would be appropriate to provide Working Group members with a copy of the standard form contract for SRC.	IMO
	Synergy noted that decisions to run DSM are influenced by the differential between the availability and activation price. In particular, Synergy noted that the proposed methodology is more heavily weighted towards availability payments. The more that is paid via the availability price the lower the activation price will be and subsequently there will be less incentive to actually provide SRC when it is called. LGP stated that the maximum availability price could be potentially set at zero to provide more flexibility. The IMO noted that step 2.3.4 has been included to ensure the correct incentives are provided to SRC suppliers.	
	Action Point: The IMO to update section 2.3.4 to provide greater flexibility in specifying the notional availability price.	IMO
	Synergy also questioned the applicable penalty arrangements should the SRC supplier fail to respond to a request for capacity to be provided. Synergy noted that any imposable penalties will have an important role in encouraging commitment and that this level of detail would be expected in any contracts. The IMO noted that any punitive arrangements to be included in contracts need to still represent a commercially desirable contract. System Management requested that prior to the IMO entering into any SRC contract it is consulted on the dispatch arrangements for calling that capacity to be provided.	
	Step 2.9: Synergy queried the reasons for deleting the publication of outcomes section. The IMO noted that the Market Rules which do not expressly allow for publication of this information. The IMO noted that it will be further considering changes to Chapter 10 of the Market Rules to allow for the publication of the outcomes of any call for SRC. Synergy noted that a mechanism is required to provide transparency of the costs of SRC so that these can be appropriately apportioned.	

Item	Subject	Action
	Action Point: The IMO to further consider any changes to Chapter 10 of the Market Rules to allow for the publication of the outcomes of any call for SRC and report back to the Working Group.	IMO
6	GENERAL BUSINESS	
	Maximum Reserve Capacity Price Working Group (MRCPWG)	
	The IMO noted that it would be sending out the list of MRCP Scoping Questions to be covered by the MRCPWG along with the Terms of Reference to Market Advisory Committee (MAC) members on 22 April 2010. Once comments from MAC members have been received the IMO will issue a call for membership of the MRCPWG to all of industry.	
	MRCP Market Procedure (PC_2009_12)	
	The Chair noted that Alinta had requested the Working Group discuss the appropriateness of the changes approved under the Procedure Change Proposal: Market Procedure for the determination of the MRCP (PC_2009_12). In particular, the removal of the values of the major components from the Market Procedure, with the intention to derive these values from the 2007 Allen Consulting Group report unless a significant change has occurred (as specified in the Market Procedure). LGP noted that it maintains its support of PC_2009_12. The Working Group did not make any further comments on PC_2009_12. The Chair noted that any major concerns with the approach of not specifying the major components in the Market Procedure will be within the scope of work for the MRCP Working Group.	
7	NEXT MEETING	
	The Chair noted that the next Working Group meeting (time and date TBA) will discuss the IMO's:	
	further revised SRC Market Procedure; and	
	proposed changes to the Monitoring Protocol.	
8	CLOSED	
	The Chair thanked all members for attending.	Chair
	The Chair declared the meeting closed at 11.55 am.	



# **IMO Procedure Change and Development Working Group - Action Points**

#### Legend:

Unshaded	Unshaded action points are still being progressed.
Shaded	Shaded action points are actions that have been completed
Missing	Action items missing from sequence have been completed from previous meeting and subsequently removed from the log.

#	Procedure arising	Section	Action	Status/Progress
14	Market Procedure for Supplementary Reserve Capacity	2.7	The IMO to investigate whether eligible services would sit in the Dispatch Merit Order or whether a separate SRC merit order would be provided.	Underway. The IMO to provide System Management with the outcomes from its investigation to allow System Management to ensure that its systems would allow for SRC to be included on the DMO.
22	Market Procedure for Reserve Capacity Testing	1.8	The IMO and System Management to discuss improvements to the verification process further out of session	Completed. The IMO and System Management determined this meeting was no longer necessary given that an IT solution for communication and data validation of requests for tests has been agreed.
34	Market Procedure for Undertaking the LTPASA	2.1	The IMO to consider defining the term of Long duration outage	Underway - The IMO has engaged MMA to consider a definition of a Long duration outage. Following the completion of this work the

#	Procedure arising	Section	Action	Status/Progress
	3			definition will be provided back to the working Group for consideration and a further Procedure Change Proposal initiated if required.
36	Market Procedure for Undertaking the LTPASA	2.2.1 (c)	The IMO to investigate whether there might be a number of Intermittent Loads not registered for this step.	Completed. The IMO does not consider that further investigation is necessary as the IMO's interest for the purposes of this step is in registered Intermittent Loads and expected registered Intermittent Loads.
43			IMO to publish the minutes of Meeting 4 on the Website	Completed.
44	Market Procedure for Certification of Reserve Capacity – SKM Report		Working Group members to provide any comments on the proposed power factors by 20 May 2010	Completed.
45	Market Procedure for Certification of Reserve Capacity – SKM Report		Verve Energy to consider whether interpolating points (to 0.1°C) or rounding values would be most practicable for developing a temperature dependence curve	Completed: Verve Energy provided the IMO with its view that interpolating points would be more practicable. The IMO has agreed and included this in the proposed procedure.
46	Market Procedure for Certification of Reserve Capacity – SKM Report		Working Group members to consider whether:  o use of 0.1°C data; or  rounding values to a higher required MW level for all temperatures  is the most appropriate option for determining the temperature dependence curve for a facility and provide the IMO with comments by 20 May 2010.	Completed.

#	Procedure arising	Section	Action	Status/Progress
47	Market Procedure for Certification of Reserve Capacity	1	IMO to review the introduction to ensure no duplicated information is contained in steps 1.1 – 1.5 and amend accordingly.	Completed: The IMO removed section 1.5 and amended the introduction to remove any duplication of information.
48	Market Procedure for Certification of Reserve Capacity	1.4.1(a)	IMO to include a reference to Interruptible Loads.	Completed.
49	Market Procedure for Certification of Reserve Capacity	1.4.1(a)(i) & (ii):	IMO to amend to refer to Intermittent Generator	Completed.
50	Market Procedure for Certification of Reserve Capacity	1.6	IMO to include sub-section headings, in particular relating to accreditation of independent experts (step 1.6.2-4).	Completed.
51	Market Procedure for Certification of Reserve Capacity	1.8.3	IMO to remove any duplication between the statements made in this step and clarify that registration in WEMS for the purposes of certified capacity does not mean that an applicant is required to be registered as a Market Participant	Completed.
52	Market Procedure for Certification of Reserve Capacity	1.8.8	IMO to amend as follows "Additional clarification of the some of the"	Completed.
53	Market Procedure for Certification of Reserve Capacity	1.8.11	IMO to amend to refer to the same period as for certification.	Completed.
54	Market Procedure for Certification of Reserve Capacity	1.8.12	IMO to amend to refer to Market Participants that require credits for that cycle.	Completed.
55	Market Procedure for Certification of Reserve Capacity	1.9.4	IMO to amend as follows " details of this the process for becoming committed can be found"	Completed.

#	Procedure arising	Section	Action	Status/Progress
56	Market Procedure for Certification of Reserve Capacity	1.9.6	IMO to consider including in the Market Procedure a:  • more general section to apply for both Certification of Reserve Capacity and ECRC; and • glossary section.	The IMO has put this procedure change on hold pending the completion of the 2010 certification process to be finished. The next version of the Procedure Change Proposal will be presented to the Working Group prior to it being formally submitted into the change process.
57	Market Procedure for Certification of Reserve Capacity	1.9.10	IMO to amend to refer to Market Participants that require credits for that cycle.	Completed.
58	Market Procedure for Certification of Reserve Capacity	1.9.12	IMO to amend to refer to step 1.8 and 1.9 of the procedure.	Completed.
59	Market Procedure for Certification of Reserve Capacity	1.10.2	IMO to consider whether this step needs to be updated to take into account when a facility is registered.	The IMO has put this procedure change on hold pending the completion of the 2010 certification process to be finished. The next version of the Procedure Change Proposal will be presented to the Working Group prior to it being formally submitted into the change process.
60	Market Procedure for Certification of Reserve Capacity	1.10.14	IMO to remove any duplication between the statements made in this step.	Completed.
61	Market Procedure for Certification of Reserve Capacity	1.10.17	IMO to consider separating this step into two separate steps.	Completed.
62	Market Procedure for Certification of Reserve Capacity	1.10.25	IMO to review the drafting of this step with a view to delineating the other factors for consideration.	Completed. The IMO has reviewed and does not consider that any further amendments are necessary.
63	Market Procedure for Certification of Reserve Capacity	1.11.1	IMO agreed to amend as follows " existing non-intermittent or intermittent generating Facilities"	Completed.

#	Procedure arising	Section	Action	Status/Progress
64	Market Procedure for Certification of Reserve Capacity	1.11.4	IMO to include a the suggested change in clause 4.11.1(g) to refer to network constraints rather than transmission constraints on the Rules Change Log.	Completed.
65	Market Procedure for Certification of Reserve Capacity	1.11.15	IMO to amend as follows " from 4  December up to an including 2009 or 1  October from 2010 onwards in Year 3".	Completed.
66	Market Procedure for Certification of Reserve Capacity	1.12	IMO to include Interruptible Load	Completed.
67	Market Procedure for Certification of Reserve Capacity	1.13.4	IMO to consider the inclusion of a consultation step with System Management.	Completed.
68	Market Procedure for Certification of Reserve Capacity	1.13.8	IMO to amend as follows " from 4  December up to an including 2009 or 1  October from 2010 onwards in Year 3".	Completed.
69	Market Procedure for Certification of Reserve Capacity	1.13.14	IMO to remove any duplication between the statements made in this step.	Completed.
70	Market Procedure for Certification of Reserve Capacity	1.14.3	IMO to consider including a step stating a Market Participant must submit a report in either section 1.8 or 1.9.	Completed. The IMO has reviewed and does not consider that an amendment is required as sections 1.1 and 1.14 state that a report must be submitted. The IMO considers that these are the appropriate places to refer to this.
71	Market Procedure for Certification of Reserve Capacity	1.14.4 & 5	IMO to consider whether there should be step referring to NCS included (similar to step 1.11.4).	Completed.
72	Market Procedure for Certification of Reserve Capacity	1.14.12	IMO to amend as follows " for a new Intermittent Generator is zero."	Completed.
73	Market Procedure for Certification of Reserve Capacity	1.15	IMO to include Interruptible Loads.	Completed.

#	Procedure arising	Section	Action	Status/Progress
74	Market Procedure for Certification of Reserve Capacity	1.15.7	IMO to amend to "Reserve Capacity Rreduction" and include a cross reference to the registration requirements.	The IMO has put this procedure change on hold pending the completion of the 2010 certification process to be finished. The next version of the Procedure Change Proposal will be presented to the Working Group prior to it being formally submitted into the change process.
75	Market Procedure for Certification of Reserve Capacity	Appendix A: Generator Capability	IMO to consider amending to apply for only new facilities	Completed. Based on the out of session advice of the Working Group the IMO amended the temperature dependence curves to be required for intervals up to 5 degrees and removed the section requiring relevant power factors be provided for each Facility.
76	Market Procedure for Supplementary Reserve Capacity	2.3.2	IMO to consider an appropriate alternative to the use of the VoLL from the NEM for determining the Maximum Contract Value.	The IMO has put this procedure change on hold due to the preparation of the Statement of Opportunities and pending the completion of the 2010 certification process. The next version of the Procedure Change Proposal will be presented to the Working Group prior to it being formally submitted into the change process.
77	Market Procedure for Supplementary Reserve Capacity	2.3.2	IMO to consider whether it would be appropriate to provide Working Group members with a copy of the standard form contract for SRC	See above.
78	Market Procedure for Supplementary Reserve Capacity	2.3.4	IMO to update section 2.3.4 to provide greater flexibility in specifying the notional availability price	See above.



## Agenda Item 4: IMO's Market Procedure Project

#### 1. BACKGROUND

The IMO is required by the Wholesale Electricity Market Rules (Market Rules) to have in place a number of Market Procedures. The purpose of these Market Procedures is to supplement the Market Rules by explaining how the Market Rules will operate and how the IMO will implement it obligations under the Market Rules.

Market Procedures provide more technical or process related detail than the Market Rules. In particular, they should provide enough additional information to the processes undertaken by the IMO transparent to Market Participants.

#### 2. IMO'S MARKET PROCEDURE PROJECT

The IMO has recently embarked on a project to progressively upgrade all of its Market Procedures to be more useable, relevant and easily understood. Key elements of the review include:

- developing a design template for all IMO Market Procedures;
- determining common sections to be included in all IMO Market Procedures;
- undertaking both a technical and legal review of existing IMO Market Procedures; and
- reviewing the content of existing IMO Market Procedures and re-writing these to ensure:
  - the process is accurately captured in a logical order (including process flow diagrams and checklists where appropriate);
  - o any unnecessary or duplicated information is removed; and
  - o all relevant information is presented.

The IMO Market Procedure Project will be ongoing for the next 18 months as all of the IMO Market Procedures are reviewed and updated to reflect the new format and content requirements. During this time the IMO will require the advice of the IMO Procedure Change and Development Working Group and as such will be convening meetings of the Working Group on a more regular basis than previously.



MARKET PROCEDURE: Procedure Administration

**VERSION 3** 



### **ELECTRICITY INDUSTRY ACT 2004**

# ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

## WHOLESALE ELECTRICITY MARKET RULES

#### **COMMENCEMENT:**

This Market Procedure took effect from 8:00am (WST) on the same date as the Wholesale Electricity Market Rule, in which this Procedure is made in accordance with, commences.

#### **VERSION HISTORY**

VERSION	EFFECTIVE DATE	NOTES
1	21 September 2006	Market Procedure for Procedure Administration
2	1 October 2009 Amendments to Market Procedure resulting from PC_2009_02	
3	Xx Xxx 2010	Amendments to Market Procedure resulting from PC_2009_021



# **CONTENTS**

1	PRO	CEDURE OVERVIEW	1
	1.1	Relationship with the Market Rules	1
	1.2	Purpose	1
	1.3	Application	1
	1.4	Associated Market Procedures	1
	1.5	Interpretation	1
2	PRO	CEDURE STEPS	2
	2.1	Initiating the Procedure Change Process	4
	2.3	Publication of Procedure Change Proposals	5
	2.4	Notification to Market Advisory Committee	6
	2.5	Submissions on Procedure Change Proposals	6
	2.6	Procedure Change Report	6
	2.7	IMO Decisions on System Management Procedure Change Proposals	7
	2.8	Commencement of Market Procedures	7
An	pend	x A	8



#### 1 PROCEDURE OVERVIEW

#### 1.1 Relationship with the Market Rules

- 1.1.1 This Procedure Administration Market Procedure (Procedure) should be read in conjunction with clause 2.9.5 of the Wholesale Electricity Market (WEM) Rules (Market Rules).
- 1.1.2 Reference to particular Market Rules within the Procedure in bold and square brackets [MR XX] are current as of 1 July 2010. These references are included for convenience only, and are not part of this Procedure.

#### 1.2 Purpose

- 1.2.1 The Procedure outlines the process by which Market Procedures (including Power System Operation Procedures) are to be developed and amended.
- 1.2.2 This Procedure provides the processes to be followed by:
  - a) the IMO in developing and approving Procedure Change Proposals;
  - b) System Management in developing Procedure Change Proposals; and
  - c) Rule Participants where participating in the Procedure Change Process.

#### 1.3 Application

1.3.1 This Procedure applies to the IMO, System Management and Rule Participants.

#### 1.4 Associated Market Procedures

- 1.4.1 The following IMO Market Procedures are associated with this Procedure:
  - a) Notices and Communications.

#### 1.5 Interpretation

- 1.5.1 In this Procedure, unless the contrary intention is expressed:
  - a) terms used in this Procedure have the same meaning as in the Market Rules;
  - b) to the extent that this Procedure is contrary or inconsistent with the Market Rules, the Market Rules shall prevail to the extent of the inconsistency;

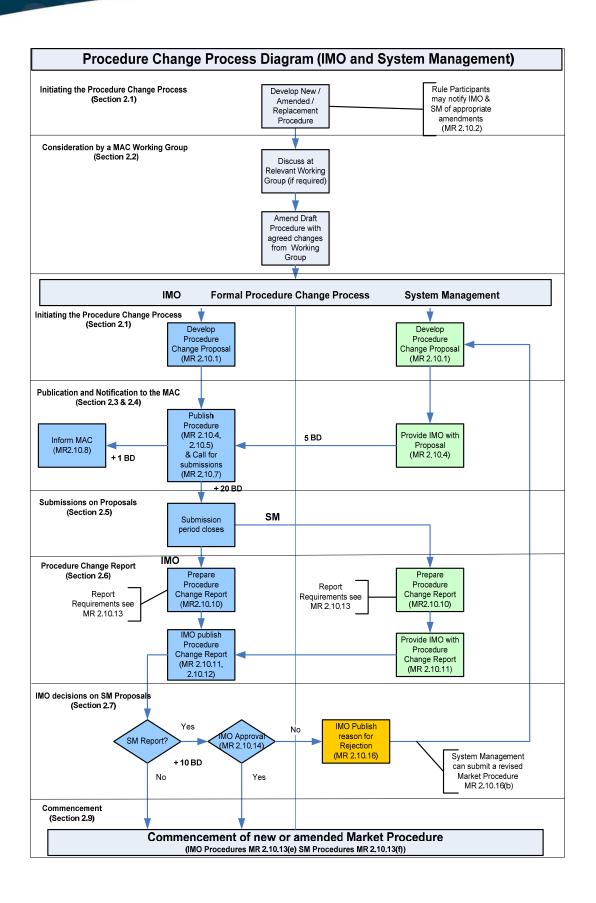


- a reference to the Market Rules or Market Procedures includes any associated forms required or contemplated by the Market Rules or Market Procedures; and
- d) words expressed in the singular include the plural or vice versa.

#### 2 PROCEDURE STEPS

This section outlines the procedure steps associated with the Procedure Change Process. The diagram on the next page gives an overview of the process. Details of the associated sections of this Procedure are also indicated.







#### 2.1 Initiating the Procedure Change Process

- 2.1.1 The Procedure Change Process is initiated by either the IMO or System Management drafting a Procedure Change Proposal (proposal) [MR 2.10.1]. System Management is responsible for changes to its Power System Operation Procedures. The IMO is responsible for changes to its Market Procedures.
- 2.1.2 A proposal can be initiated only by the IMO or System Management, as applicable, and will be in response to either:
  - a) The IMO or System Management, as applicable, determining that an existing Market Procedure requires amending or replacing; or
  - b) The IMO or System Management, as applicable, developing new Market Procedures, or amending or replacing existing Market Procedures following an amendment to the Market Rules [MR2.10.3]. This must be done as soon as practicable after the Amending Rules commence; or
  - c) A notification from a Rule Participant [MR2.10.2]. Any such notification must be in writing, by email, to the following:
    - i) The IMO: as outlined in the Notices and Communications Procedure
    - ii) System Management by email to: market.development@westernpower.com.au
- 2.1.3 The IMO and System Management have the discretion whether to initiate any Procedure Change Process arising from a Rule Participant's notification.
- 2.1.4 The proposal must include the details outlined in clause 2.10.6 of the Market Rules. Amendments to the Market Procedure or Power System Operation Procedure must be clearly identified using tracked changes where possible [MR2.10.6].

#### 2.2 Consideration by a Market Advisory Committee Working Group

- 2.2.1 The Market Advisory Committee (MAC) is an advisory body to the IMO and System Management comprised of industry representatives. The MAC is established pursuant to clause 2.3.1 of the Market Rules and one of its roles is to advise the IMO and System Management regarding Procedure Change Proposals.
- 2.2.2 The MAC may establish Working Groups comprised of representatives of Rule Participants and interested stakeholders, to assist it in providing advice to the IMO or System Management on Procedure Change Proposals [MR2.3.17].



- 2.2.3 The MAC has established the following Working Groups to consider proposed amendments to Market Procedures before a proposal is submitted into the formal Procedure Change Process:
  - a) The IMO Procedure Change and Development Working Group; and
  - b) The System Management Procedure Change and Development Working Group.
- 2.2.4 In addition to the general Working Groups referred to in step 2.2.3 of this Procedure, the MAC can initiate Working Groups to consider amendments to a specific Market Procedure, for example the Maximum Reserve Capacity Price Working Group. Further details of the current active Working Groups, including those associated with advising the IMO and System Management on potential Procedure Change Proposals are available on: <a href="http://www.imowa.com.au/mac\_working\_groups">http://www.imowa.com.au/mac\_working\_groups</a>
- 2.2.5 The IMO or System Management, as applicable, may convene an active Working Group to discuss a Procedure Change Proposal either before submitting it into the formal Procedure Change Process or during the formal Procedure Change Process.

#### 2.3 Publication of Procedure Change Proposals

- 2.3.1 Once a proposal has been formally submitted into the Procedure Change Process, the IMO will publish that proposal on its website. The IMO must publish all Procedure Change Proposals that are open for public comment on its website.
- 2.3.2 The IMO must call for submissions on the proposal and provide a due date for the submissions, being 20 Business Days following the publication of the call for submissions [MR2.10.7].
- 2.3.3 Where System Management develops a Procedure Change Proposal and provides it to the IMO for publication, the IMO must publish the proposal within 5 Business Days [MR2.10.4].
- 2.3.4 Before providing the Procedure Change Proposal to the IMO, System Management will assign the proposal a reference number to be quoted on submissions related to its Procedure Change Proposal.
- 2.3.5 For Procedure Change Proposals developed by the IMO, the IMO will assign a reference number to be quoted on submissions related to its Procedure Change Proposal. This will be in the format of PC\_YYYY\_ID.



#### 2.4 Notification to Market Advisory Committee

- 2.4.1 Once it has published a Procedure Change Proposal the IMO must notify all members of the MAC, and advise them whether it considers that the MAC should be convened in relation to the Procedure Change Proposal, giving reasons why. This notification must be in writing and made within one Business Day of publishing the Procedure Change Proposal [MR 2.10.8].
- 2.4.2 The IMO must convene a meeting of the MAC, prior to close of submissions, in relation to the Procedure Change Proposal if:
  - a) the IMO considers that advice on the Procedure Change Proposal is required from the MAC; or
  - b) two or more members of the MAC have written to the IMO indicating they consider that advice on the Procedure Change Proposal is required from the MAC [MR2.10.9].

#### 2.5 Submissions on Procedure Change Proposals

- 2.5.1 Any person may make a submission on a Procedure Change Proposal using the Procedure Change Submission form [MR2.10.7]. A copy of this form is available on the IMO website: <a href="http://www.imowa.com.au/procedure-changes">http://www.imowa.com.au/procedure-changes</a>
- 2.5.2 A submission on a Procedure Change Proposal must be made to the IMO, by email, by the due date published by the IMO for submissions.

#### 2.6 Procedure Change Report

- 2.6.1 Following the closing date of submissions, the IMO or System Management, as applicable, must prepare a Procedure Change Report [MR 2.10.10].
- 2.6.2 Prior to preparing a Procedure Change Report proposing the approval of a procedure change, the IMO or System Management, as applicable, must conduct an assessment of the proposed changes to ensure consistency with:
  - a) the Wholesale Market Objectives; and
  - b) the Market Rules, Electricity Industry Act and Regulations [MR2.9.3].
- 2.6.3 The IMO must publish the Procedure Change Reports prepared by the IMO [MR 2.10.12] and by System Management [MR 2.10.11]. The Procedure Change Report must contain all of the information outlined in clause 2.10.13 of the Market Rules [MR 2.10.13].



- 2.6.4 In proposing a date and time for procedure changes to commence, the IMO or System Management, as applicable, must be of the view that Rule Participants will have sufficient time between publication of the Procedure Change Report and commencement of the Market Procedure to implement any changes required [MR 2.10.13].
- 2.7 IMO Decisions on System Management Procedure Change Proposals
- 2.7.1 Market Procedures developed by System Management require IMO approval.
- 2.7.2 Within 10 Business Days of publishing a Procedure Change Report prepared by System Management, the IMO must decide whether to approve or reject the proposed Market Procedure or amendment to, or replacement for, the Market Procedure [MR 2.10.14].

#### Approval of Procedure Change Proposal

2.7.3 Where the IMO approves the proposed Market Procedure or amendment to, or replacement for, the Market Procedure, it must notify System Management in writing and publish on its website the information specified in clause 2.10.15 of the Market Rules.

#### Rejection of Procedure Change Proposal

- 2.7.4 Where the IMO rejects the proposed Market Procedure or amendment to, or replacement for, the Market Procedure, it must notify System Management in writing and publish on its website the information specified in clause 2.10.16(a).
- 2.7.5 In the case where the IMO rejects a Procedure Change Proposal submitted by System Management which is required by an Amending Rule, System Management must prepare and submit a new Procedure Change Proposal that complies with the Amending Rule and is acceptable to the IMO. The new Procedure Change Proposal must go through the same Procedure Change Process as all other Procedure Change Proposals [MR 2.10.16(b)].
- 2.7.6 If the IMO rejects a proposed procedure change not required by an Amending Rule, System Management has the discretion to prepare and submit a new Procedure Change Proposal or to discard the procedure change.

#### 2.8 Commencement of Market Procedures

- 2.8.1 A procedure change will commence on the date set out by the IMO:
  - in the IMO's Procedure Change Report, for IMO initiated procedure changes;
     or



- b) on the date published by the IMO with its decision to accept a Procedure Change Proposal, for procedure changes initiated by System Management [MR 2.11.3].
- 2.8.2 The IMO may extend the time and date for commencement of procedure changes if it considers that Rule Participants will not have sufficient time to implement any necessary changes required. The IMO must publish a notice of extension, including a revised time and date for commencement of the procedure change [MR 2.11.4].



**MARKET PROCEDURE: Notices and Communications** 

**VERSION 3** 



### **ELECTRICITY INDUSTRY ACT 2004**

# ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

## WHOLESALE ELECTRICITY MARKET RULES

#### **COMMENCEMENT:**

This Market Procedure took effect from 8:00am (WST) on the Same date as the Wholesale Electricity Market Rule, in which this Procedure is made in accordance with, commences.

#### VERSION HISTORY

VERSION	EFFECTIVE DATE	NOTES
1	21 September 2006	Market Procedure for Notices and Communications
2	20 January 2009	Amendments to Market Procedure resulting from PC_2008_16
3	TBA	Amendments to Market Procedure resulting from PC_2010_02



# **CONTENTS**

1.	PROCEDURE OVERVIEW		
	1.1	Relationship with the Market Rules	1
	1.2	Purpose	1
	1.3	Application	1
	1.4	Associated Market Procedures	1
	1.5	Interpretation	2
2.	PROCEDURE STEPS		2
	2.1	Provision of Notice	2
	2.2	Timing of Notice and Communications	2
	2.3	Contact Details	4



#### 1. PROCEDURE OVERVIEW

#### 1.1 Relationship with the Market Rules

- 1.1.1 This Notices and Communications Procedure (Procedure) has been developed in accordance with, and should be read in conjunction with clause 1.6.1 of the Wholesale Electricity Market (WEM) Rules (Market Rules).
- 1.1.2 Reference to particular Market Rules within the Procedure in bold and square brackets [MR XX] are current as of 1 July 2010. These references are included for convenience only, and are not part of this Procedure.

#### 1.2 Purpose

- 1.2.1 The purpose of the Procedure is to:
  - a) describe the methods by which notices and communications are to be provided to or by the IMO; and
  - b) outline when the timing of such notice will be considered to have been duly given.

#### 1.3 Application

- 1.3.1 This Procedure applies to notices and communications:
  - a) required under the Market Rules;
  - b) contemplated by the Market Rules; and
  - c) relating to the Market Rules.
- 1.3.2 For the avoidance of doubt, this Procedure does not apply to:
  - a) information or documents required to be published or released by the IMO on the public website, in accordance with clause 1.7.1 of the Market Rules; or
  - b) information or documents required to be distributed via another method specified in the Market Rules.

#### 1.4 Associated Market Procedures

1.4.1 There are no other Market Procedures associated with this Procedure.



#### 1.5 Interpretation

- 1.5.1 In this Procedure, unless the contrary intention is expressed:
  - a) terms used in this Procedure have the same meaning as those given in the Market Rules (made pursuant to the Electricity Industry (Wholesale Electricity Market) Regulations 2004);
  - b) to the extent that this Procedure is contrary or inconsistent with the Market Rules, the Market Rules shall prevail to the extent of the inconsistency;
  - c) a reference to the Market Rules or Market Procedures includes any associated forms required or contemplated by the Market Rules or Market Procedures;
  - d) words expressed in the singular include the plural or vice versa; and
  - e) the term "Business Hours" means 8.00 am to 5.00 pm Western Standard Time.

#### 2. PROCEDURE STEPS

#### 2.1 Provision of Notice

- 2.1.1 Unless otherwise provided in the Market Rules or Market Procedures, notices and communications may be properly provided using the following methods:
  - a) Courier or other form of personal delivery, to the recipient's notified place of business.
  - b) By prepaid Australia post, express post, registered post, or air mail (if outside Australia), to the recipient's notified postal address.
  - c) By facsimile, to the recipient's notified facsimile number.
  - d) By electronic mail, to the recipient's notified electronic communication address.
  - e) By voice communication by the IMO, provided the IMO confirms the communication in writing by any manner set out in steps 2.1.1 a d.

#### 2.2 Timing of Notice and Communications

- 2.2.1 Unless otherwise provided in the Market Rules and Market Procedures, notice will be considered to be properly given according to the following:
  - a) Where given by Australia post or air mail:



- (i) within Australia, on the third Business Day after the day on which it is mailed;
- (ii) outside Australia, on the tenth Business Day after the day on which it is mailed.

#### b) Where given by facsimile:

- (i) during Business Hours, on the date and at the time of successful transmission as indicated on the sender's facsimile transmission report;
- (ii) outside Business Hours and the addressee is obliged to monitor the receipt by facsimile outside of Business Hours, on the date and at the time of transmission as indicated on the sender's facsimile transmission report;
- (iii) outside Business Hours and the addressee is not obliged to monitor the receipt by facsimile outside of Business Hours, at 9.00 am on the first Business Day following transmission.

#### c) Where given by electronic mail:

- during Business Hours, on the date and at the time when notification is recorded by the sender's electronic communication system as having been first received at the electronic mail destination. To ensure valid notification, the sender should request a return receipt, request confirmation from the recipient or follow up the email with alternate confirmation;
- (ii) outside Business Hours and the addressee is obliged to monitor the receipt by electronic mail outside of Business Hours, on the date and at the time when notification is recorded by the sender's electronic communication system as having been first received at the electronic mail destination;
- (iii) outside Business Hours and the addressee is not obliged to monitor the receipt by electronic mail outside of Business Hours, at 9.00 am on the following Business Day.
- d) Where given by voice communication by the IMO:
  - (i) on the date and at the time of communication.
- e) In any other case:
  - (i) when the person actually receives the notice or communication.



#### 2.3 Contact Details

2.3.1 The contact details for the IMO are:

a) Mailing address: PO Box 7096

CLOISTERS SQUARE PERTH WA 6850

b) Courier / Personal Delivery: Level 3, Governor Stirling Tower

St Georges Terrace PERTH WA 6000

c) Telephone Number: + 61 (0) 8 9254 4300

d) Facsimile: + 61 (0) 8 9254 4399

e) Email (as relevant):

(i) For general enquiries: <u>imo@imowa.com.au</u>

(ii) For Rule/Procedure Change enquiries: <u>Market.Development@imowa.com.au</u>

(iii) For System Capacity enquiries: System.Capacity@imowa.com.au

(iv) For Market Operation enquiries: <a href="mailto:operations@imowa.optusbiz.com">operations@imowa.optusbiz.com</a>

- 2.3.2 The contact details for Rule Participants are as advised on the Rule Participant's Rule Participant registration application, unless otherwise advised.
- 2.3.3 The contact details for other recipients are as advised by the recipient.



MARKET PROCEDURE: Monitoring Protocol (Long Version)

**VERSION 3** 



#### **ELECTRICITY INDUSTRY ACT 2004**

# ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

#### WHOLESALE ELECTRICITY MARKET RULES

#### **COMMENCEMENT:**

This Market Procedure is to have effect from 8:00am (WST) on the Same date as the Wholesale Electricity Market Rule, in which this Procedure is made in accordance with, commences.

#### **VERSION HISTORY**

VERSION	EFFECTIVE DATE	NOTES
1	21 September 2006	Market Procedure for Monitoring Protocol
2	17 October 2008	Amendments to Market Procedure resulting from PC_2008_10
3	Xx Xxx 2010	Amendments to Market Procedure resulting from PC_2010_03



### **CONTENTS**

1. PROCEDURE OVERVIEW	1
1.1 Relationship with the Market Rules	1
1.2 Purpose	1
1.3 Application	1
1.4 Associated Market Procedures	2
1.5 Interpretation	2
2. PROCEDURE STEPS	2
2.1 Monitoring Rule Participants' Compliance	2
2.2 Monitoring System Management's Compliance	3
2.3 Non-compliance Reporting by Rule Participants	4
2.4 Compliance Monitoring Register	6
2.5 Investigating Alleged Breaches	7
2.6 Warnings	9
2.7 IMO Decisions	10
2.8 IMO Reports of Monitoring Activities	11
2.9 Bringing Proceedings Before the ERB	12
Appendix A - Categories of Rule Breaches and the mechanisms to Identify the Breaches	14



#### 1. PROCEDURE OVERVIEW

#### 1.1 Relationship with the Market Rules

- 1.1.1 The Monitoring Protocol has been developed in accordance with, and should be read in conjunction with, clauses 2.15.1 2.15.3 and 2.15.7 of the Wholesale Electricity Market (WEM) Rules (Market Rules).
- 1.1.2 Reference to particular Market Rules within the Monitoring Protocol in bold and square brackets [MR XX] are current as of 1 July 2010. These references are included for convenience only, and are not part of this Monitoring Protocol.

#### 1.2 Purpose

- 1.2.1 The purpose of the Monitoring Protocol is to outline how the IMO will monitor Rule Participants' compliance with the Market Rules and Market Procedures [MR 2.15.2].
- 1.2.2 This Monitoring Protocol specifies:
  - a) the IMO's monitoring processes for assessing compliance by Rule Participants with the Market Rules and Market Procedures;
  - b) a process for System Management to demonstrate compliance with the Market Rules, Market Procedures and audit processes where the IMO requires such demonstration or an audit (section 2.2);
  - c) a process for Rule Participants to report alleged breaches of the Market Rules and Market Procedures (section 2.3);
  - d) processes for investigating alleged breaches (section 2.5);
  - e) guidelines for the IMO when issuing warnings about alleged breaches to Rule Participants (section 2.6); and
  - the procedure for bringing proceedings in respect of specified Market Rule breaches before the Electricity Review Board [MR 2.15.3].

#### 1.3 Application

- 1.3.1 This Monitoring Protocol applies to:
  - a) The IMO;
  - b) System Management; and
  - c) Rule Participants.



#### 1.4 Associated Market Procedures

- 1.4.1 The following Market Procedures are associated with this Monitoring Protocol:
  - a) System Management Monitoring and Reporting Protocol [MR 2.15.4]; and
  - b) Notices and Communications Procedure.
- 1.4.2 The Market Rules also require that the IMO and Economic Regulation Authority to agree a reporting protocol [MR 2.15.8].

#### 1.5 Interpretation

- 1.5.1 In this Monitoring Protocol, unless the contrary intention is expressed:
  - a) terms used in this Monitoring Protocol have the same meaning as those given in the Market Rules (made pursuant to the Electricity Industry (Wholesale Electricity Market) Regulations 2004);
  - b) to the extent that this Monitoring Protocol is contrary or inconsistent with the Market Rules, the Market Rules shall prevail to the extent of the inconsistency;
  - a reference to the Market Rules or Market Procedures includes any associated forms required or contemplated by the Market Rules or Market Procedures;
  - d) words expressed in the singular include the plural or vice versa; and
  - e) the following terms have the following meanings:
    - "Market Regulations" means the Electricity Industry (Wholesale Electricity Market) Regulations 2004;
    - "Regulation" means a regulation in the Market Regulations.
- 1.5.2 For the avoidance of doubt, this Monitoring Protocol does not include any protocols for the IMO monitoring the effectiveness of the market.

#### 2. PROCEDURE STEPS

#### 2.1 Monitoring Rule Participants' Compliance



- 2.1.1 The IMO is required to monitor Rule Participants' compliance with the Market Rules and Market Procedures [MR 2.13.2]. The IMO is required to have processes and systems in place to enable it to monitor Rule Participants' behaviour for compliance [MR 2.13.3].
- 2.1.2 In addition to its own monitoring activities, the IMO has a reporting relationship with System Management in respect to System Management's monitoring of Rule Participant compliance [MR 2.13.8]. This reporting relationship is outlined in the separate Power System Operation Procedure: Monitoring and Reporting Protocol.

#### 2.2 Monitoring System Management's Compliance

- 2.2.1 In addition to the IMO's general monitoring obligations in relation to System Management as a Rule Participant, the Market Rules provide for further processes to monitor compliance by System Management.
- 2.2.2 In order to establish compliance by System Management with the Market Rules and Market Procedures, at least annually the IMO must:
  - require System Management to provide to the IMO all records required to be kept by System Management under the Market Rules and Market Procedures; or
  - b) subject System Management to an audit by a Market Auditor appointed by the IMO [MR 2.14.6].
- 2.2.3 If the IMO reasonably considers that System Management may not be in compliance with the Market Rules and Market Procedures, it may require step 2.2.2 to be performed more frequently than annually.
- 2.2.4 Where System Management is subject to an audit described in step 2.2.2(b), the IMO must provide System Management with a copy of the audit report [MR 2.14.6A].
- 2.2.5 Within 20 Business Days of receiving a report specified in step 2.2.4, System Management must either:
  - a) accept the report and any recommendations contained in it; or
  - b) provide the IMO with a separate report setting out the matters raised in the Market Auditor's report which System Management accepts and those which it does not accept and setting out System Management's reasons for that view [MR 2.14.6A].
- 2.2.6 Where System Management is subject to an audit as specified in step 2.2.2(b), the IMO must publish the Market Auditor's report and any report provided by System



- Management in step 2.2.5(b) within 30 Business Days of System Management receiving the Market Auditor's report [MR 2.14.6B].
- 2.2.7 The IMO has the discretion to determine if the report outlined in step 2.2.6 should be deemed a Public Report for the purpose of its confidentiality status. In determining the publication status of the report, the IMO will consider the Wholesale Market Objectives outlined in clause 1.2.1 of the Market Rules.
- 2.2.8 The IMO must annually prepare a report for the Minister on System Management's compliance with the Market Rules and Market Procedures [MR 2.14.7]. The report will contain:
  - a) any reports published in step 2.2.6;
  - b) the results of any investigations undertaken by the IMO; and
  - c) details of any relevant information received in step 2.2.2 a.
- 2.2.9 The IMO must provide System Management with the report prepared in step 2.2.8 [MR 2.14.8].
- 2.2.10 Within 20 Business Days of receiving a report specified in step 2.2.9 System Management must either:
  - a) accept the report and any recommendations contained in it; or
  - b) provide the IMO with a separate report setting out the matters raised in the Market Auditor's report which System Management accepts and those which it does not accept and setting out System Management's reasons for that view [MR 2.14.8].
- 2.2.11 The IMO must, within 10 Business Days following the date specified in step 2.2.10, provide to the Minister the report prepared in step 2.2.8 and any report prepared by System Management in step 2.2.10 [MR 2.14.9].
- 2.2.12 The IMO may also receive notifications of potential non-compliant behaviour of System Management from other Rule Participants.
- 2.2.13 Where the IMO considers System Management may have breached the Market Rules or Market Procedures, the investigation and other processes set out in this procedure apply.
- 2.3 Non-compliance Reporting by Rule Participants



- 2.3.1 In addition to its own monitoring, the IMO may also be notified of compliance issues by:
  - a) a Rule Participant discovering its own non-compliant behaviour, where the non-compliant Rule Participant may:
    - (i) voluntarily report themselves to the IMO; or
    - (ii) be required to provide information to the IMO, under the Market Rules or Market Procedures, that reports or evidences the non-compliant behaviour;
  - b) a Rule Participant discovering non-compliant behaviour by another Rule Participant. A Rule Participant may inform the IMO, in writing, if it considers that another Rule Participant is in breach of the Market Rules or Market Procedures and may also provide evidence of the breach [MR 2.13.4].
- 2.3.2 Where System Management considers that another Rule Participant has breached the Market Rules or Market Procedures, it must notify the IMO of the alleged breach, in writing, on discovery of the non-compliant behaviour [MR 2.13.6].
- 2.3.3 The notification should contain:
  - a) the name of the Rule Participant and contact details for the person responsible for the notification;
  - b) the name of the Rule Participant who is alleged to have breached the Market Rules or Market Procedures;
  - c) the specific clauses in the Market Rules or Market Procedures alleged to have been breached;
  - d) the dates and times on which the alleged breach occurred;
  - e) a description of the reasons that the notifying Rule Participant has for considering a breach may have taken place, including any evidence of the potential breach; and
  - f) if the breach is by the notifying Rule Participant, a description of the reasons for the breach, including any mitigating circumstances and any proposed remedies.
- 2.3.4 The contact details for the IMO are outlined in the Notices and Communications Procedure.



- 2.3.5 The IMO will record the alleged breach of the Market Rules or Market Procedures in its Compliance Monitoring Register.
- 2.3.6 The IMO will provide a letter of acknowledgement to the notifying Rule Participant within three business days of receipt of any written notification of non-compliant behaviour.
- 2.3.7 Under most circumstances the IMO will notify the Rule Participant alleged to be non-compliant. The notification will set out:
  - a) that the Rule Participant is alleged to have committed a breach;
  - b) a summary of the alleged non-compliant behaviour; and
  - c) a contact person at the IMO to discuss the matter and processes.

However, the IMO has the discretion not to provide such notification if the IMO reasonably believes that doing so would prejudice an investigation.

- 2.3.8 The IMO will not disclose to the Rule Participant alleged to have committed the breach the identity of the Rule Participant notifying the non-compliant behaviour. An exception to this provision applies where System Management notifies the IMO of an alleged breach as a result of its monitoring activities. In that case the Rule Participant alleged to have committed the breach will be advised that System Management has made the allegation.
- 2.3.9 Where the notification by a Rule Participant results in an IMO decision regarding the potential rule breach, including bringing proceedings before the Electricity Review Board, the IMO will inform the Rule Participant of the decision in accordance with section 2.7 of this Monitoring Protocol.

#### 2.4 Compliance Monitoring Register

- 2.4.1 The IMO will maintain a Compliance Monitoring Register [MR 2.13.10].
- 2.4.2 The IMO must record in the Compliance Monitoring Register:
  - a) any potential breaches of the Market Rules and Market Procedures that it identifies through its own monitoring activities;
  - b) any potential breaches of the Market Rules and Market Procedures that System Management identifies through its monitoring activities;



c) any potential breaches of the Market Rules and Market Procedures notified by any other Rule Participant in accordance with section 2.3 of this Monitoring Protocol.

#### 2.4.3 The Compliance Monitoring Register will contain:

- a) a unique identifier for each potential breach of the Market Rules or Market Procedures;
- b) the status of the potential breach of the Market Rules or Market Procedures whether it is still under investigation, whether the IMO or the Electricity Review Board has come to any decisions;
- c) the Rule Participant potentially in breach of the Market Rules or Market Procedures;
- d) the date when the potential breach was notified;
- e) the Rule Participant who identified the potential breach, including contact details:
- f) the specific clauses in the Market Rules or Market Procedures alleged to have been breached;
- g) the dates and times on which the alleged breach occurred;
- h) records of any findings the IMO may have as to whether it is reasonable to believe non-compliant behaviour took place;
- i) records of any warnings issued by the IMO to the Rule Participant, including any Rule Participant response;
- j) records of IMO decisions concerning Category A decisions, including penalties and orders given;
- k) records of IMO decisions to take Category B or C breaches to the Electricity Review Board and the decision of the Electricity Review Board, including penalties and orders given;
- records of Rule Participant compliance with any decisions of the IMO or the Electricity Review Board concerning a breach of the Market Rules or Market Procedures.

#### 2.5 Investigating Alleged Breaches



- 2.5.1 On becoming aware of an alleged breach of the Market Rules or Market Procedures, the IMO is required to investigate the behaviour at issue [MR 2.13.10].
- 2.5.2 Where the IMO considers that an alleged breach notified by a Rule Participant relates to a matter already under investigation, the IMO may join the two investigations.
- 2.5.3 Where the IMO considers that an alleged breach notified by a Rule Participant has already been investigated, and the notification does not give rise to any new information or factors to justify further investigating the matter, the IMO may have regard to the previous investigation and not investigate the matter further.
- 2.5.4 Where an alleged breach notified by a Rule Participant relates to a matter in which the IMO has already concluded that no breach occurred, the IMO may have regard to its previous decision, and the factors giving rise to it, and not reopen the matter.
- 2.5.5 The purpose of Steps 2.5.3 and 2.5.4 is to prevent the IMO having to reinvestigate previously settled matters.
- 2.5.6 In conducting investigations, the IMO has the power to:
  - a) require information and records from Rule Participants, including searching premises [MR 2.13.12(a)];
  - b) inspect Rule Participants' equipment [MR 2.13.12(b)]; and
  - c) subject to Part 5, Division 2 of the Market Regulations, search the premises of the Rule Participant.
- 2.5.7 Where the IMO requires information, it may make a request by email, facsimile or post to the person nominated as the contact for the Rule Participant. The IMO will indicate a reasonable timeframe in which it considers any required information and records should be provided.
- 2.5.8 Where the IMO decides that, in the course of its investigation, it needs to search the Rule Participant's premises for documents or records or to inspect the Rule Participants' equipment, it must follow the requirements set out Part 5, Division 2 of the Market Regulations. These relate to:
  - a) an officer or employee of the IMO as authorised persons, in accordance with Regulation 23;
  - b) application for search warrants, in accordance with Regulation 24;
  - c) announcements before entry, in accordance with Regulation 25;



- d) giving details of the warrant to the occupier, in accordance with Regulation 26;
- e) provision of copies of seized documents, in accordance with Regulation 27; and
- f) retention and return of seized documents, in accordance with Regulation 28.
- 2.5.9 Rule Participants must cooperate with IMO investigations, including providing information and records in a timely manner and allowing reasonable access to equipment as requested [MR 2.13.13].
- 2.5.10 In the event that a Rule Participant does not cooperate with an IMO investigation, the IMO may appoint an independent person to investigate the matter and to provide a report or other documentation as required. The Rule Participant under investigation is liable for the costs, unless the IMO otherwise determines, and must assist the person undertaking the investigation [MR 2.13.14].
- 2.5.11 The IMO may meet with the Rule Participant on one or more occasions to discuss the alleged breach and avenues for rectifying it [MR 2.13.11]. Where the IMO is of the view that the potential breach of the Market Rules or Market Procedures is ongoing and serious, it will urgently seek such a meeting.
- 2.5.12 At the conclusion of its investigation, the IMO will record in its Compliance Monitoring Register whether it considers, given the evidence available, a breach of the Market Rules or Market Procedures has taken place.

#### 2.6 Warnings

- 2.6.1 Where the IMO reasonably believes that non-compliant behaviour has taken place, it may issue a warning to the Rule Participant.
- 2.6.2 The warning will be issued within two Business Days of the completion of the investigation.
- 2.6.3 The warning will be in writing and set out:
  - a) the specific clause or clauses of the Market Rules or Market Procedures that are believed to have been breached;
  - b) a full description of the behaviour considered to be non-compliant; and
  - c) a request for an explanation;



- d) a request to rectify the behaviour at issue, including a timeframe that the IMO considers to be reasonable to accomplish the request.
- 2.6.4 The IMO may provide the warning by e-mail, facsimile or post to the person nominated as the contact for the Rule Participant.
- 2.6.5 The Rule Participant may request a meeting with the IMO to discuss the alleged breach and proposed resolutions. The IMO will not unreasonably refuse such a meeting.
- 2.6.6 The Rule Participant is required to provide the explanation requested in the warning within five Business Days of receipt of the warning. The explanation is required to be in writing and may be provided to the IMO by e-mail, facsimile or post. The IMO may extend this timeframe, at the request of the Rule Participant, by providing confirmation in writing.
- 2.6.7 On receipt of a response by the Rule Participant to the IMO warning, the IMO will record this in the Compliance Monitoring Register [MR 2.13.10].

#### 2.7 IMO Decisions

2.7.1 Pursuant to the Regulation 30 of the Market Regulations, certain Market Rules have been deemed "civil penalty provisions." In Schedule 1 to the Market Regulations, these provisions have been allocated a category (A, B or C) and maximum penalty amounts payable for breach. The table at Appendix A provides the category allocated to the respective Market Rules provisions.

#### **Category A Provisions**

- 2.7.2 The IMO decides if a breach of a Category A provision has occurred [MR 2.13.15]. In making its decision, the IMO will take into account:
  - a) The results of its investigation as outlined in section 2.5 above;
  - b) The Rule Participant's response to an IMO warning, if any, as outlined in section 2.6 above.
- 2.7.3 If the IMO decides that a breach has not occurred, and the allegation was made under clause 2.13.4 of the Market Rules, the IMO will notify the Rule Participant and the complainant, if any, of its decision [MR 2.13.16(b)].
- 2.7.4 If the IMO decides that a breach has occurred, the IMO may, but is not required to, issue a penalty notice in accordance with the Market Regulations [MR 2.13.16(a)].



- 2.7.5 Instances where the IMO may decide not to issue a penalty notice include isolated instances or accidental breaches, especially where action has been taken to rectify the breach and prevent a reoccurrence.
- 2.7.6 A Rule Participant issued with a penalty notice may seek review by the Electricity Review Board, in accordance with the Market Regulations, of the IMO's decision [MR 2.13.17].
- 2.7.7 In accordance with Regulation 31, within 28 days of receiving a penalty notice a Rule Participant must:
  - a) pay the penalty to the IMO; or
  - b) apply to the Electricity Review Board for review.
- 2.7.8 In accordance with Regulation 37, any penalty payments received by the IMO must be distributed in accordance with the Market Rules. If the Market Rules do not provide for distribution of civil penalty amounts, the penalty payments will be credited to the Consolidated Fund.

#### Category B and C Provisions

- 2.7.9 The IMO may decide that a breach of a Category B or Category C provision has not occurred. In making its decision, the IMO will take into account:
  - a) The results of its investigation as outlined in section 2.5 above;
  - b) The Rule Participant's response to an IMO warning, if any, as outlined in section 2.6 above
- 2.7.10 If the IMO decides that a breach has not occurred, and the allegation was made under clause 2.13.4 of the Market Rules, the IMO will notify the Rule Participant and the complainant, if any, of its decision.
- 2.7.11 If the IMO, after conducting an investigation, reasonably believes that a breach of the Market Rules has occurred, the IMO may, but is not required to, bring proceedings before the Electricity Review Board [MR 2.13.18].
- 2.7.12 The Electricity Review Board is able to order civil penalties for contravention of the Market Rules, pursuant to Regulation 33.

#### 2.8 IMO Reports of Monitoring Activities

2.8.1 The IMO is required to release a report at least every six months which provides a summary of:



- a) proceedings brought before the Electricity Review Board, including any findings and orders by the Board; and
- b) Penalty Notices issued by the IMO for Category A breaches unless the IMO's decision has been set aside by the Electricity Review Board [MR 2.13.26].
- 2.8.2 The IMO may, but is not required to, release a report on:
  - a) any one or more matters concerning Category A provisions for which the IMO issued a penalty notice; or
  - b) any one or more matters that have been referred to the Electricity Review Board.

including the findings of the IMO and/or the Electricity Review Board, as applicable, and any sanctions imposed by the IMO or the Electricity Review Board [MR 2.13.28].

- 2.8.3 Where any significant incidents arise the IMO has the discretion to:
  - a) publish a report set out in step 2.8.1 in less than six months following its previous report; or
  - b) publish a report set out in step 2.8.2.
- 2.8.4 Publication and circulation of the reports outlined in steps 2.8.1 and 2.8.2 will be in accordance with clauses 2.13.27 and 2.13.31 of the Market Rules
- 2.8.5 Claims of confidentiality of information, in relation to information that may be published in the reports set out in steps 2.8.1 and 2.8.2, will be considered by the IMO in accordance with clause 10.2 of the Market Rules which sets out information confidentiality status and its classes [MR 2.13.30].

#### 2.9 Bringing Proceedings Before the ERB

- 2.9.1 The requirements for making an application to the ERB are set out in the Electricity Industry (Wholesale Electricity Market) regulations 2004. Applications must:
  - a) be in writing;
  - b) state that the applicant is the IMO;
  - c) specify the provision of the regulations under which the IMO is making the application (ie WEM Regulations 32(1) and 33(1));



- d) provide details of the contravention of the market rules that the IMO considers has occurred, including the name and address of the participant alleged to have contravened the market rules; and
- e) specify the nature of the order sought.
- 2.9.2 Once it has lodged an application with the ERB the IMO will notify the Participants involved, and provide them with a copy of the application.



## Appendix A - Categories of Rule Breaches and the mechanisms to Identify the Breaches

To the extent that this Appendix A and the Market Regulations are inconsistent, the Market Regulations prevail.

Clause	Penalty	Description	Proposed monitoring
	class		
2.13.13	В	Rule Participant must cooperate with an investigation including providing information and allowing access.	
2.13.14(a)	В	Rule Participant must cooperate with an investigation by a person appointed by the IMO with regard to possible rule breach	
2.13.25	В	Rule Participant must comply with IMO direction giving effect to Electricity Review Board (ERB) decision	
2.16.6(b)	В	Market Participants must provide information to ERA	The ERA can notify the IMO where it does not receive requested information
2.27.1	Α	Network Operators provide loss factors to IMO	The IMO will check on 1 June if it has received the loss factors
2.29.6	С		System Management can notify the IMO where it considers that the equipment is not compliant
2.29.7	С	•	
2.29.8	В	that a Dispatchable Load is able to respond to System Management output directions	
2.30C.4	В	Rule Participant must provide additional Standing Data if requested by the IMO	IMO will record if requests are not complied with
2.31.9	В	-	The IMO can record as it carries out registration process for facilities



Clause	Penalty class	Description	Proposed monitoring
2.32.4(a)	С	Rule Participant must comply with a Suspension Notice	The IMO will monitor that the Rule Participant does not make submissions but is still meeting Reserve Capacity Obligations
2.34.2	В	Rule Participant must ensure Standing Data kept accurate	Monitored by System Management
2.34.3	В	Rule Participant must ensure Standing Data kept accurate	Monitored by System Management
2.34.6	В	1	The IMO will record if a Rule Participant does not respond to the request
2.35.1	Α	•	System Management can notify the IMO where it considers that the equipment is not compliant
2.35.2	А	•	
2.35.3	A		System Management can notify the IMO where it considers that the equipment is not compliant
2.36.3	Α	Market Participants must meet IMO's data and IT security standards	The IMO's IT staff will investigate any problems caused on the WEMS systems
2.36.4	С		The IMO's IT staff will investigate any problems caused on the WEMS systems
2.37.5	В	IMO if electricity purchased through market is expected to	The IMO will track this through its prudential monitoring, and may retrospectively investigate where the amount has increased in the past month whether the participant could have reasonably known
2.38.1	В	Market Participant must provide Credit Support	The IMO will track this through its prudential monitoring
2.38.2	В	Market Participant must provide replacement Credit Support where existing Credit Support due to end	



Clause	Penalty class	Description	Proposed monitoring
2.38.3	В	Participant must provide additional Credit Support where required	The IMO will track this through its prudential monitoring
2.41.2	В	make a submission which could	The IMO will track this through its prudential monitoring, and may retrospectively investigate where the amount has increased in past months whether the Market Participant could have reasonably known
2.42.4	С	Market Participant must respond to a Margin Call	The IMO will track this through its prudential monitoring
2.44.4	С	-	The IMO will record any non-compliance at the time, and will also assess non-compliance after the fact as part of its investigation into the market suspension
3.4.6	С	Rule Participants must comply with System Management directions and endeavour to assist System Management during high risk operating state	
3.4.8	С	Rule Participants must immediately inform System Management if cannot comply with direction	Monitored by System Management
3.5.8	С	Rule Participants must comply with System Management directions and endeavour to assist System Management during an Emergency Operating State	
3.5.10	С	Rule Participant must immediately inform System Management if it cannot comply with a direction issues during an Emergency Operating State	Monitored by System Management
3.6.5	С	Network Operators must implement load shedding plans	Monitored by System Management
3.6.6B	С	Network Operators must comply with manual disconnection instructions from System Management	Monitored by System Management
3.8.2(c)	В	System Management and Rule Participants must supply	The IMO will record if no report was provided



Clause	Penalty	Description	Proposed monitoring
	class		
		requested reports on system incidents to the IMO	
3.11.7A	С	Electricity Generation Corporation (EGC) must make capacity available to System Management to provide Ancillary Services	
3.16.4	В	Rule Participants must provide MT-PASA information	Monitored by System Management
3.16.7	В	Rule Participants must provide MT-PASA information	Monitored by System Management
3.16.8A	В	Rule Participants must provide additional MT-PASA information requested by System Management within the specified timeframes	
3.17.5	С	Rule Participants must provide ST-PASA information	Monitored by System Management
3.17.6	С	Rule Participants must update ST-PASA information if it changes	Monitored by System Management
3.18.7	С		System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.18.8	С	Market Participant or Network	System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.18.9	С		System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.18.13(d) (i)	С	Network Operators must	System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.19.1	С		



3.19.8 C	Network Operators must comply with System Management rejection of an outage Market Participants and	System Management can notify the IMO where it considers that the outage planning provisions have been breached  System Management can notify the IMO where it
3.20.2 C		System Management can notify the IMO where it
	•	considers that the outage planning provisions have been breached
3.21.4 C	Market Participants and	System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.21A.2 C	Market Participant seeking to conduct a Commissioning Test must request permission from System Management	Monitored by System Management
3.21A.6 C	Market Participant that no longer plans to conduct a Commissioning Test must inform System Management	Monitored by System Management
3.21A.12 C	Market Participant must conform to the approved Commissioning Test plan	Monitored by System Management
3.21A.13 C		Monitored by System Management
3.21B.1 C	Market Participant must seek permission from System Management before decommissioning a Scheduled Generator holding Capacity Credits	Monitored by System Management
3.21B.2 C 4.5.4 C	be sought at least 2 hours in advance and specified information must be provided	Monitored by System Management  The IMO will record if data is not provided



Clause	Penalty class	Description	Proposed monitoring
		PASA information to IMO	
4.10.2	С	Market Participant who claims alternative fuel must have on site fuel or uninterruptible fuel supply	
4.22.5(b)	В	Market Participant with Long Term Special Price Arrangement must annually re-apply for certification	
4.27.5	В	Market Participants must provide reports to IMO on expected Planned Outages where Reserve Capacity of market underperforming	
6.5.1A	В		The IMO will record where the submission is not received
6.6.3	С	Market Generator must not offer prices that do not reflect its reasonable expectation of short run marginal cost	
6.7.3	С	Market Generator must not specify quantities in a Bilateral Submission that exceed the quantity of energy it is contracted to supply	
6.7.4	С	Market Customer must not overstate its consumption as indicated by its Net Contract Position that cannot be explained by forecasting uncertainty or loss factors.	
6.19.9	В	1	
7.5.5	С	·	



Clause	Penalty class	Description	Proposed monitoring
7.6A.2(g)	С	EGC must notify System Management if it is unable to comply with a dispatch plan	Monitored by System Management
7.6A.3(c)	С	EGC must notify System Management if it unable to comply with a Dispatch Instruction	
7.6A.5(e)	В	EGC and System Management must make records created because of the operation of clause 7.6A available to the IMO on request	·
7.6A.6	В	EGC and System Management must keep all records created because of the operation of clause 7.6A	·
7.7.9(b)	С	Market Participants must follow	The IMO will receive notification from System Management or the Market Participant that they believe the Procedure has not been followed
7.9.1	С	confirm with System	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached
7.9.3	С	coordinate with System	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached
7.9.5	С	confirm with System	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached
7.9.7	С	coordinate with System	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached



Clause	Penalty class	Description	Proposed monitoring
7.9.9	С	with System Management	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached
7.9.10	С	with System Management	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached
7.9.12(a)	С	System Management where it	desynchronisation provisions have been breached
7.10.1	С		Monitored by System Management
7.10.3	С	•	
7.10.6	С	Market Participant must comply with System Management direction to follow Resource Plan etc, or inform System Management if it cannot	
7.10.6A	С	Market Participant that cannot comply with a request made under clause 7.10.5 must notify System Management	
7.11.7	С	Market Participants and Network Operators must comply with System Management directions issued in a Dispatch Advisory or directly	
7.11.9	С		



Clause	Penalty class	Description	Proposed monitoring
		Dispatch Advisory	
8.1.3	В	Metering Data Agent must operate to Metering Protocol	The IMO will record where its interactions with the Metering Data Agent lead it to believe the Metering Data Agent is not operating to the Protocol (e.g. the process for missing data is not operating), and participants can also notify the IMO
8.3.1	В	Metering Data Agent must maintain Meter Registry	Participants can notify to the IMO where they do not consider that the Metering Data Agent is meeting the Meter Registry requirements
8.3.3	В	Metering Data Agent must respond to IMO information request related to facility registration	•
8.3.5	В	_	Participants can notify to the IMO where they do not consider that the Metering Data Agent is meeting the Protocol requirements
8.4.1	В		The IMO will record where the Metering Data Agent does not provide information on schedule
8.5.2	В	Metering Data Agent must respond to IMO notification of metering dispute	The IMO will record where the Metering Data Agent does not respond
8.8	В	Metering Data Agent must	The IMO will record where the Metering Data Agent does not provide information requested
9.1.2(e)	В	Rule Participants must assist IMO to produce necessary tax invoices etc	The IMO will record where participants do not respond to its requests
9.3.2	В		The IMO will record where the Metering Data Agent does not provide data on schedule
9.22.5	В	-	The IMO will record where participants do not make payments on time using the EFT system



Clause	Penalty class	Description	Proposed monitoring
9.23.3	В	IMO if a suspension event happens to it (e.g. bankruptcy,	The IMO will monitor this through information generally available to the public and in the industry, through its communications with the ERA, and when any Rule Participant notifies it.
9.24.7	С		The IMO will record where participants do not make payments on time using the EFT system
10.1.2	В	Rule Participants must retain information	This will primarily be detected as part of any other investigation under the rules, where it is revealed that the Rule Participant's records are not adequate.
10.2.4	В	Rule Participants cannot release confidential information	The affected Rule Participant can notify the IMO



MARKET PROCEDURE: Monitoring Protocol (Concise Version)

**VERSION 3** 



#### **ELECTRICITY INDUSTRY ACT 2004**

# ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

#### WHOLESALE ELECTRICITY MARKET RULES

#### **COMMENCEMENT:**

This Market Procedure is to have effect from 8:00am (WST) on the Same date as the Wholesale Electricity Market Rule, in which this Procedure is made in accordance with, commences.

#### **VERSION HISTORY**

VERSION	EFFECTIVE DATE	NOTES
1	21 September 2006	Market Procedure for Monitoring Protocol
2	17 October 2008	Amendments to Market Procedure resulting from PC_2008_10
3	Xx Xxx 2010	Amendments to Market Procedure resulting from PC_2010_03



### **CONTENTS**

1. PROCEDURE OVERVIEW	1
1.1 Relationship with the Market Rules	1
1.2 Purpose	1
1.3 Application	1
1.4 Associated Market Procedures	1
1.5 Interpretation	1
2. PROCEDURE STEPS	2
2.1 Monitoring Rule Participants' Compliance	2
2.2 Monitoring System Management's Compliance	2
2.3 Non-compliance Reporting by Rule Participants	3
2.4 Compliance Monitoring Register	4
2.5 Investigating Alleged Breaches	5
2.6 Warnings	6
2.7 IMO Decisions	7
2.8 IMO Reports of Monitoring Activities	7
2.9 Bringing Proceedings Before the ERB	7
Appendix A - Categories of Rule Breaches and the mechanisms to Identify the Breaches	9



#### 1. PROCEDURE OVERVIEW

#### 1.1 Relationship with the Market Rules

- 1.1.1 The Monitoring Protocol has been developed in accordance with, and should be read in conjunction with, clauses 2.15.1 2.15.3 and 2.15.7 of the Wholesale Electricity Market (WEM) Rules (Market Rules).
- 1.1.2 Reference to particular Market Rules within the Monitoring Protocol in bold and square brackets [MR XX] are current as of 1 July 2010. These references are included for convenience only, and are not part of this Monitoring Protocol.

#### 1.2 Purpose

1.2.1 The purpose of the Monitoring Protocol is to outline how the IMO will monitor Rule Participants' compliance with the Market Rules and Market Procedures [MR 2.15.2].

#### 1.3 Application

- 1.3.1 This Monitoring Protocol applies to:
  - a) The IMO;
  - b) System Management; and
  - c) Rule Participants.

#### 1.4 Associated Market Procedures

- 1.4.1 The following Market Procedures are associated with this Monitoring Protocol:
  - a) System Management Monitoring and Reporting Protocol [MR 2.15.4]; and
  - b) Notices and Communications Procedure.

#### 1.5 Interpretation

- 1.5.1 In this Monitoring Protocol, unless the contrary intention is expressed:
  - a) terms used in this Monitoring Protocol have the same meaning as those given in the Market Rules (made pursuant to the Electricity Industry (Wholesale Electricity Market) Regulations 2004);



- b) to the extent that this Monitoring Protocol is contrary or inconsistent with the Market Rules, the Market Rules shall prevail to the extent of the inconsistency;
- a reference to the Market Rules or Market Procedures includes any associated forms required or contemplated by the Market Rules or Market Procedures;
- d) words expressed in the singular include the plural or vice versa; and
- e) the following terms have the following meanings:

"Market Regulations" means the Electricity Industry (Wholesale Electricity Market) Regulations 2004;

"Regulation" means a regulation in the Market Regulations.

1.5.2 For the avoidance of doubt, this Monitoring Protocol does not include any protocols for the IMO monitoring the effectiveness of the market.

#### 2. PROCEDURE STEPS

#### 2.1 Monitoring Rule Participants' Compliance

2.1.1 One of the IMO's functions is to monitor Rule Participants' compliance with the Market Rules and Market Procedures. In addition to the IMO's monitoring, System Management also monitors participant's compliance with certain clauses of the Market Rules and reports its findings to the IMO. This reporting relationship is outlined in the separate Power System Operation Procedure: Monitoring and Reporting Protocol.

#### 2.2 Monitoring System Management's Compliance

- 2.2.1 The IMO has particular obligations to monitoring compliance by System Management as a Rule Participant. These are set out in the Market Rules.
- 2.2.5 Where the IMO considers System Management may have breached the Market Rules or Market Procedures, the investigation and other processes set out in this procedure apply.
- 2.2.6 The IMO publishes a report, at least one a year, on the results of its monitoring of System Management. Generally these reports will be deemed to be a Public Report for the purpose of confidentiality status. However in determining the publication status of any report the IMO will consider the Wholesale Market Objectives outlined in clause 1.2.1 of the Market Rules.



#### 2.3 Non-compliance Reporting by Rule Participants

- 2.3.1 A Rule Participant may inform the IMO, in writing, if it considers that another Rule Participant is in breach of the Market Rules or Market Procedures and may also provide evidence of the breach [MR 2.13.4].
- 2.3.3 The notification should contain:
  - a) the name of the Rule Participant and contact details for the person responsible for the notification;
  - b) the name of the Rule Participant who is alleged to have breached the Market Rules or Market Procedures;
  - c) the specific clauses in the Market Rules or Market Procedures alleged to have been breached;
  - d) the dates and times on which the alleged breach occurred;
  - e) a description of the reasons that the notifying Rule Participant has for considering a breach may have taken place, including any evidence of the potential breach; and
  - f) if the breach is by the notifying Rule Participant, a description of the reasons for the breach, including any mitigating circumstances and any proposed remedies.
- 2.3.4 The contact details for the IMO are outlined in the Notices and Communications Procedure.
- 2.3.5 The IMO will record the alleged breach of the Market Rules or Market Procedures in its Compliance Monitoring Register.
- 2.3.6 The IMO will provide a letter of acknowledgement to the notifying Rule Participant within three business days of receipt of any written notification of non-compliant behaviour.
- 2.3.7 Under most circumstances the IMO will notify the Rule Participant alleged to be non-compliant. The notification will set out:
  - a) that the Rule Participant is alleged to have committed a breach;
  - b) a summary of the alleged non-compliant behaviour; and



- c) a contact person at the IMO to discuss the matter and processes.
- However, the IMO has the discretion not to provide such notification if the IMO reasonably believes that doing so would prejudice an investigation.
- 2.3.8 The IMO will not disclose to the Rule Participant alleged to have committed the breach the identity of the Rule Participant notifying the non-compliant behaviour. An exception applies where System Management notifies the IMO of an alleged breach as a result of its monitoring activities. In that case the identity of System Management will be disclosed to the Rule Participant alleged to have committed the breach.
- 2.3.9 Where the notification by a Rule Participant results in an IMO decision regarding the potential rule breach, including bringing proceedings before the Electricity Review Board, the IMO will inform the Rule Participant of the decision in accordance with section 2.7 of this Monitoring Protocol.

#### 2.4 Compliance Monitoring Register

- 2.4.1 The IMO will maintain a Compliance Monitoring Register [MR 2.13.10].
- 2.4.2 The IMO must record in the Compliance Monitoring Register:
  - a) any potential breaches of the Market Rules and Market Procedures that it identifies through its own monitoring activities;
  - b) any potential breaches of the Market Rules and Market Procedures that System Management identifies through its monitoring activities;
  - c) any potential breaches of the Market Rules and Market Procedures notified by any other Rule Participant in accordance with section 2.3 of this Monitoring Protocol.
- 2.4.3 The Compliance Monitoring Register will contain:
  - a unique identifier for each potential breach of the Market Rules or Market Procedures;
  - b) the status of the potential breach of the Market Rules or Market Procedures whether it is still under investigation, whether the IMO or the Electricity Review Board has come to any decisions;
  - c) the Rule Participant potentially in breach of the Market Rules or Market Procedures;



- d) the date when the potential breach was notified;
- e) the Rule Participant who identified the potential breach, including contact details;
- f) the specific clauses in the Market Rules or Market Procedures alleged to have been breached;
- g) the dates and times on which the alleged breach occurred;
- h) records of any findings the IMO may have as to whether it is reasonable to believe non-compliant behaviour took place;
- i) records of any warnings issued by the IMO to the Rule Participant, including any Rule Participant response;
- j) records of IMO decisions concerning Category A decisions, including penalties and orders given;
- k) records of IMO decisions to take Category B or C breaches to the Electricity Review Board and the decision of the Electricity Review Board, including penalties and orders given;
- records of Rule Participant compliance with any decisions of the IMO or the Electricity Review Board concerning a breach of the Market Rules or Market Procedures.

#### 2.5 Investigating Alleged Breaches

- 2.5.1 If it becomes aware of an alleged breach of the Market Rules or Market Procedures, the IMO is required to investigate the behaviour [MR 2.13.10].
- 2.5.2 Where the IMO considers that an alleged breach notified by a Rule Participant relates to a matter already under investigation, the IMO may join the two investigations.
- 2.5.3 Where the IMO considers that an alleged breach notified by a Rule Participant has already been investigated, and the notification does not give rise to any new information or factors to justify further investigating the matter, the IMO may have regard to the previous investigation and not investigate the matter further.
- 2.5.4 Where an alleged breach notified by a Rule Participant relates to a matter in which the IMO has already concluded that no breach occurred, the IMO may have regard to its previous decision, and the factors giving rise to it, and not reopen the matter.



- 2.5.5 The purpose of Steps 2.5.3 and 2.5.4 is to prevent the IMO having to reinvestigate previously settled matters.
- 2.5.6 Where the IMO requires information, it may make a request by email, facsimile or post to the person nominated as the contact for the Rule Participant. The IMO will indicate a reasonable timeframe in which it considers any required information and records should be provided.
- 2.5.7 Where the IMO decides that, in the course of its investigation, it needs to search the Rule Participant's premises for documents or records or to inspect the Rule Participants' equipment, it must follow the requirements set out Part 5, Division 2 of the Market Regulations.
- 2.5.8 The IMO may meet with the Rule Participant on one or more occasions to discuss the alleged breach and avenues for rectifying it [MR 2.13.11]. Where the IMO is of the view that the potential breach of the Market Rules or Market Procedures is ongoing and serious, it will urgently seek such a meeting.
- 2.5.9 At the conclusion of its investigation, the IMO will record in its Compliance Monitoring Register whether it considers, given the evidence available, a breach of the Market Rules or Market Procedures has taken place.

#### 2.6 Warnings

- 2.6.1 Where the IMO reasonably believes that non-compliant behaviour has taken place, it may issue a warning to the Rule Participant.
- 2.6.2 The warning will be issued within two Business Days of the completion of the investigation.
- 2.6.3 The IMO may provide the warning by e-mail, facsimile or post to the person nominated as the contact for the Rule Participant.
- 2.6.4 The Rule Participant may request a meeting with the IMO to discuss the alleged breach and proposed resolutions. The IMO will not unreasonably refuse such a meeting.
- 2.6.5 The Rule Participant is required to provide the explanation requested in the warning within five Business Days of receipt of the warning. The explanation is required to be in writing and may be provided to the IMO by e-mail, facsimile or post. The IMO may extend this timeframe, at the request of the Rule Participant, by providing confirmation in writing.
- 2.6.6 On receipt of a response by the Rule Participant to the IMO warning, the IMO will record this in the Compliance Monitoring Register [MR 2.13.10].



#### 2.7 IMO Decisions

2.7.1 Pursuant to the Regulation 30 of the Market Regulations, certain Market Rules have been deemed "civil penalty provisions." In Schedule 1 to the Market Regulations, these provisions have been allocated a category (A, B or C) and maximum penalty amounts payable for breach. The table at Appendix A shows the category allocated to the respective Market Rules provisions, and how these are monitored.

#### **Category A Provisions**

- 2.7.2 The IMO decides if a breach of a Category A provision has occurred [MR 2.13.15]. In making its decision, the IMO will take into account:
  - a) The results of its investigation as outlined in section 2.5 above;
  - b) The Rule Participant's response to an IMO warning, if any.
- 2.7.3 In accordance with Regulation 31, within 28 days of receiving a penalty notice a Rule Participant must:
  - a) pay the penalty to the IMO; or
  - b) apply to the Electricity Review Board for review.
- 2.7.4 In accordance with Regulation 37, any penalty payments received by the IMO must be distributed in accordance with the Market Rules. If the Market Rules do not provide for distribution of civil penalty amounts, the penalty payments will be credited to the Consolidated Fund.

#### 2.8 IMO Reports of Monitoring Activities

- 2.8.1 Where any significant incidents arise the IMO has the discretion to:
  - a) publish a report set out in clause 2.13.26 of the Market Rules in less than six months following its previous report; or
  - b) publish a report set out in clause 2.13.28 of the Market Rules.

#### 2.9 Bringing Proceedings Before the ERB

- 2.9.1 The requirements for making an application to the ERB are set out in the Electricity Industry (Wholesale Electricity Market) regulations 2004. Applications must:
  - a) be in writing;



- b) state that the applicant is the IMO;
- c) specify the provision of the regulations under which the IMO is making the application (ie WEM Regulations 32(1) and 33(1));
- d) provide details of the contravention of the market rules that the IMO considers has occurred, including the name and address of the participant alleged to have contravened the market rules; and
- e) specify the nature of the order sought.
- 2.9.2 Once it has lodged an application with the ERB the IMO will notify the Participants involved, and provide them with a copy of the application.



### Appendix A - Categories of Rule Breaches and the mechanisms to Identify the Breaches

To the extent that this Appendix A and the Market Regulations are inconsistent, the Market Regulations prevail.

Clause	Penalty class	Description	Proposed monitoring
2.13.13	В	Rule Participant must cooperate with an investigation including providing information and allowing access.	
2.13.14(a)	В	Rule Participant must cooperate with an investigation by a person appointed by the IMO with regard to possible rule breach	
2.13.25	В	Rule Participant must comply with IMO direction giving effect to Electricity Review Board (ERB) decision	IMO will follow up to confirm directions are complied with
2.16.6(b)	В	Market Participants must provide information to ERA	The ERA can notify the IMO where it does not receive requested information
2.27.1	Α	Network Operators provide loss factors to IMO	The IMO will check on 1 June if it has received the loss factors
2.29.6	С	-	System Management can notify the IMO where it considers that the equipment is not compliant
2.29.7	С		
2.29.8	В	•	System Management can notify the IMO where it considers that the equipment is not compliant
2.30C.4	В	Rule Participant must provide additional Standing Data if requested by the IMO	IMO will record if requests are not complied with
2.31.9	В	· ·	The IMO can record as it carries out registration process for facilities



Clause	Penalty class	Description	Proposed monitoring
2.32.4(a)	С	Rule Participant must comply with a Suspension Notice	The IMO will monitor that the Rule Participant does not make submissions but is still meeting Reserve Capacity Obligations
2.34.2	В	Rule Participant must ensure Standing Data kept accurate	Monitored by System Management
2.34.3	В	Rule Participant must ensure Standing Data kept accurate	Monitored by System Management
2.34.6	В	-	The IMO will record if a Rule Participant does not respond to the request
2.35.1	Α	·	System Management can notify the IMO where it considers that the equipment is not compliant
2.35.2	А	·	
2.35.3	A	·	System Management can notify the IMO where it considers that the equipment is not compliant
2.36.3	Α	Market Participants must meet IMO's data and IT security standards	The IMO's IT staff will investigate any problems caused on the WEMS systems
2.36.4	С		The IMO's IT staff will investigate any problems caused on the WEMS systems
2.37.5	В	IMO if electricity purchased through market is expected to	The IMO will track this through its prudential monitoring, and may retrospectively investigate where the amount has increased in the past month whether the participant could have reasonably known
2.38.1	В	Market Participant must provide Credit Support	The IMO will track this through its prudential monitoring
2.38.2	В	Market Participant must provide replacement Credit Support where existing Credit Support due to end	



Clause	Penalty class	Description	Proposed monitoring
2.38.3	В	Participant must provide additional Credit Support where required	The IMO will track this through its prudential monitoring
2.41.2	В	make a submission which could	The IMO will track this through its prudential monitoring, and may retrospectively investigate where the amount has increased in past months whether the Market Participant could have reasonably known
2.42.4	С	Market Participant must respond to a Margin Call	The IMO will track this through its prudential monitoring
2.44.4	С	•	The IMO will record any non-compliance at the time, and will also assess non-compliance after the fact as part of its investigation into the market suspension
3.4.6	С	Rule Participants must comply with System Management directions and endeavour to assist System Management during high risk operating state	
3.4.8	С	Rule Participants must immediately inform System Management if cannot comply with direction	
3.5.8	С	Rule Participants must comply with System Management directions and endeavour to assist System Management during an Emergency Operating State	
3.5.10	С	Rule Participant must immediately inform System Management if it cannot comply with a direction issues during an Emergency Operating State	
3.6.5	С	Network Operators must implement load shedding plans	Monitored by System Management
3.6.6B	С	Network Operators must comply with manual disconnection instructions from System Management	
3.8.2(c)	В	System Management and Rule Participants must supply	The IMO will record if no report was provided



Clause	Penalty class	Description	Proposed monitoring
		requested reports on system incidents to the IMO	
3.11.7A	С	Electricity Generation Corporation (EGC) must make capacity available to System Management to provide Ancillary Services	
3.16.4	В	Rule Participants must provide MT-PASA information	Monitored by System Management
3.16.7	В	Rule Participants must provide MT-PASA information	Monitored by System Management
3.16.8A	В	Rule Participants must provide additional MT-PASA information requested by System Management within the specified timeframes	
3.17.5	С	Rule Participants must provide ST-PASA information	Monitored by System Management
3.17.6	С	Rule Participants must update ST-PASA information if it changes	Monitored by System Management
3.18.7	С		System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.18.8	С	Market Participant or Network	System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.18.9	С	Participant must revise outage plan if time changes	System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.18.13(d) (i)	С	Network Operators must	System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.19.1	С	-	



Clause	Penalty class	Description	Proposed monitoring
3.19.8	С	Network Operators must	System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.20.2	С	Network Operators must	System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.21.4	С	•	System Management can notify the IMO where it considers that the outage planning provisions have been breached
3.21A.2	С	Market Participant seeking to conduct a Commissioning Test must request permission from System Management	
3.21A.6	С	Market Participant that no longer plans to conduct a Commissioning Test must inform System Management	Monitored by System Management
3.21A.12	С		Monitored by System Management
3.21A.13	С	Market Participant that cannot conform to the approved Commissioning Test plan must inform System Management	
3.21B.1	С	Market Participant must seek permission from System Management before decommissioning a Scheduled Generator holding Capacity Credits	Monitored by System Management
3.21B.2	С	be sought at least 2 hours in advance and specified information must be provided	
4.5.4	С	Rule Participants provide LT-	The IMO will record if data is not provided



Clause	Penalty class	Description	Proposed monitoring
		PASA information to IMO	
4.10.2	С	Market Participant who claims alternative fuel must have on site fuel or uninterruptible fuel supply	
4.22.5(b)	В	Market Participant with Long Term Special Price Arrangement must annually re-apply for certification	
4.27.5	В	Market Participants must provide reports to IMO on expected Planned Outages where Reserve Capacity of market underperforming	
6.5.1A	В		The IMO will record where the submission is not received
6.6.3	С	Market Generator must not offer prices that do not reflect its reasonable expectation of short run marginal cost	
6.7.3	С	Market Generator must not specify quantities in a Bilateral Submission that exceed the quantity of energy it is contracted to supply	
6.7.4	С	Market Customer must not overstate its consumption as indicated by its Net Contract Position that cannot be explained by forecasting uncertainty or loss factors.	
6.19.9	В	•	
7.5.5	С	·	



Clause	Penalty class	Description	Proposed monitoring
7.6A.2(g)	С	EGC must notify System Management if it is unable to comply with a dispatch plan	Monitored by System Management
7.6A.3(c)	С	EGC must notify System Management if it unable to comply with a Dispatch Instruction	
7.6A.5(e)	В	EGC and System Management must make records created because of the operation of clause 7.6A available to the IMO on request	
7.6A.6	В	EGC and System Management must keep all records created because of the operation of clause 7.6A	
7.7.9(b)	С	Market Participants must follow	The IMO will receive notification from System Management or the Market Participant that they believe the Procedure has not been followed
7.9.1	С	confirm with System	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached
7.9.3	С	coordinate with System	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached
7.9.5	С	confirm with System	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached
7.9.7	С	coordinate with System	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached



Clause	Penalty class	Description	Proposed monitoring
7.9.9	С	with System Management	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached
7.9.10	С	with System Management	System Management can notify the IMO where it considers that the synchronisation and desynchronisation provisions have been breached
7.9.12(a)	С	System Management where it	desynchronisation provisions have been breached
7.10.1	С	Market Participant must comply with its Resource Plan, Dispatch Instructions or directions from System Management	
7.10.3	С		
7.10.6	С	Market Participant must comply with System Management direction to follow Resource Plan etc, or inform System Management if it cannot	
7.10.6A	С	Market Participant that cannot comply with a request made under clause 7.10.5 must notify System Management	
7.11.7	С	Market Participants and Network Operators must comply with System Management directions issued in a Dispatch Advisory or directly	
7.11.9	С	Market Participants, Network	



Clause	Penalty class	Description	Proposed monitoring
		Dispatch Advisory	
8.1.3	В	Metering Data Agent must operate to Metering Protocol	The IMO will record where its interactions with the Metering Data Agent lead it to believe the Metering Data Agent is not operating to the Protocol (e.g. the process for missing data is not operating), and participants can also notify the IMO
8.3.1	В	Metering Data Agent must maintain Meter Registry	Participants can notify to the IMO where they do not consider that the Metering Data Agent is meeting the Meter Registry requirements
8.3.3	В	Metering Data Agent must respond to IMO information request related to facility registration	·
8.3.5	В	_	Participants can notify to the IMO where they do not consider that the Metering Data Agent is meeting the Protocol requirements
8.4.1	В		The IMO will record where the Metering Data Agent does not provide information on schedule
8.5.2	В	Metering Data Agent must respond to IMO notification of metering dispute	The IMO will record where the Metering Data Agent does not respond
8.8	В	Metering Data Agent must	The IMO will record where the Metering Data Agent does not provide information requested
9.1.2(e)	В	Rule Participants must assist IMO to produce necessary tax invoices etc	The IMO will record where participants do not respond to its requests
9.3.2	В		The IMO will record where the Metering Data Agent does not provide data on schedule
9.22.5	В	-	The IMO will record where participants do not make payments on time using the EFT system



Clause	Penalty class	Description	Proposed monitoring
9.23.3	В	IMO if a suspension event happens to it (e.g. bankruptcy,	The IMO will monitor this through information generally available to the public and in the industry, through its communications with the ERA, and when any Rule Participant notifies it.
9.24.7	С		The IMO will record where participants do not make payments on time using the EFT system
10.1.2	В	information	This will primarily be detected as part of any other investigation under the rules, where it is revealed that the Rule Participant's records are not adequate.
10.2.4	В	Rule Participants cannot release confidential information	The affected Rule Participant can notify the IMO

#### **ELECTRICITY INDUSTRY ACT 2004**

### ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

#### WHOLESALE ELECTRICITY MARKET RULES

# Market Procedure for: Determination of the Maximum Reserve Capacity Price

Version 2 Deleted: 1.1

**Commencement:** This Market Procedure is to have effect from 8:00am (WST) on 13 October 2008

i

#### **Version history**

13 October 2008	New Market Procedure for Determination of the Maximum Reserve Capacity Price resulting from PC_2008_06		
4 December 2008	Amended Market Procedure for Determination of the Maximum Reserve Capacity Price resulting from PC_2008_14		
1 April 2010	Amendments to the Procedure resulting from Procedure Change Proposal PC_2009_12		
Xx_July 2010	Amendments resulting from Procedure Change Proposal PC 2010 04		

1.	Proc	edure for Determining the Maximum Reserve Capacity Price	1
		Interpretation	
	1.2.	Purpose	1
	1.3.	Application	1
		Overview of the Maximum Reserve Capacity Price	
		Definition of Power Station	
	1.6.	Scope of the Factors to Maximum Reserve Capacity Price	2
		Development of Costs for the Power Station	
		Transmission Connection Works	
		Liquid Fuel Storage and Handling Facilities	
		Fixed Operating and Maintenance Costs	
		Land Costs	
	1.12.	Legal, Financing, Insurance, Approvals and Other Costs	6
		Weighted Average Cost of Capital	
		Determination of the Maximum Reserve Capacity Price	
		Major Review	

### 1. Procedure for Determining the Maximum Reserve Capacity Price

This procedure for determining the Maximum Reserve Capacity Price sets out the principles to be applied and steps to be taken by the Independent Market Operator (IMO) in order to develop and propose the Maximum Reserve Capacity Price as required under the Market Rules. Under the Market Rules, the Maximum Reserve Capacity Price is used as the price cap for the Reserve Capacity Auction in the event that one is held. It is also used as the basis of determining the price of uncontracted Capacity Credits in the case where the Reserve Capacity Auction is cancelled.

#### 1.1. Interpretation

- 1 In this procedure, unless the contrary intention is expressed:
  - terms used in this procedure have the same meaning as those given in the Wholesale Electricity Market Amending Rules (made pursuant to Electricity Industry (Wholesale Electricity Market) Regulations 2004);
  - (b) to the extent that this procedure is contrary or inconsistent with the Market Rules, the Market Rules shall prevail to the extent of the inconsistency;
  - (c) a reference to the Market Rules or Market Procedures includes any associated forms required or contemplated by the Market Rules or Market Procedures; and
  - (d) words expressed in the singular include the plural or vice versa.

#### 1.2. Purpose

The purpose of this procedure is to describe the steps that the IMO must undertake in determining the Maximum Reserve Capacity Price in each Reserve Capacity Cycle.

This procedure is made in accordance with clause 4.16.3 of the Market Rules.

#### 1.3. Application

- 1 This procedure applies to:
  - The IMO in determining the Maximum Reserve Capacity Price; and
  - Western Power in developing estimates of the costs associated with connecting a notional Power Station to the 330 kV transmission system.

#### 1.4. Overview of the Maximum Reserve Capacity Price

The Maximum Reserve Capacity Price sets the maximum offer price that can be submitted in a Reserve Capacity Auction and is used as the basis to determine an administered Reserve Capacity Price if no auction is required. Each year the IMO is required to conduct a review of the appropriateness of a number of the components that are used to determine the Maximum Reserve Capacity Price.

#### 1.5. Definition of Power Station

- The Power Station upon which the Maximum Reserve Capacity Price shall be based will:
  - (a) Be representative of an industry standard liquid-fuelled Open Cycle Gas Turbine (OCGT) power station.
  - (b) Have a nominal nameplate capacity of 160 MW.
  - (c) Operate on distillate as its fuel source.
  - (d) Have a capacity factor of 2%.
  - (e) Include low Nitrous Oxide (NOx) burners or associated technologies as would be required to demonstrate good practice in power station development.

#### 1.6. Scope of the Factors to Maximum Reserve Capacity Price

- 1 The Maximum Reserve Capacity Price is to include all reasonable costs expected to be incurred in the development of the Power Station, which will include estimation and determination of:
  - (a) Power Station balance of plant costs, which are those other ancillary and infrastructure costs that would normally be experienced when developing a project of this nature.
  - (b) Land costs.
  - (c) Costs associated with the development of liquid fuel storage and handling facilities.
  - (d) Costs associated with the connection of the Power Station to the bulk transmission system.
  - (e) Allowances for legal costs, insurance costs, financing costs and environmental approval costs.
  - (f) Reasonable allowance for a contingency margin.

(g) Estimates of fixed operating and maintenance costs for the Power Station, fuel handling facilities and the transmission connection components.

#### 1.7. Development of Costs for the Power Station

- The IMO shall engage a consultant to provide advice, including an estimate of the costs associated with designing, purchasing and constructing the Power Station. The Power Station costs shall be determined with specific reference to the use of actual project-related data and shall take into account the specific development conditions under which the power station will be developed. This may include direct reference to:
  - (a) Existing power stations, or power station projects under development, in Australia and more particularly Western Australia.
  - (b) Worldwide demand for gas turbine engines for power stations.
  - (c) The engineering, design and construction, environment and cost factors in Western Australia.
  - (d) The level of economic activity at the state, national and international level.
- Development of the Power Station costs shall include components for the gas turbine engines, and all Balance of Plant costs that would normally be applicable to such a Power Station. This must include, but will not be limited to the following items:
  - (a) Civil Works.
  - (b) Mechanical Works.
  - (c) Electrical Works.
  - (d) Buildings and Structures.
  - (e) Engineering and Plant Setup.
  - (f) Miscellaneous and other costs.
  - (g) Communications and Control equipment.
  - (h) Commissioning Costs.

#### 1.8. Transmission Connection Works

- 1 Western Power shall provide Transmission Connection Cost Estimates on the basis defined in Step 1.8.2.
- 2 The Transmission Connection Cost Estimate shall be developed on the following basis:
  - (a) The capital cost (procurement, installation and commissioning, excluding land cost) of a generic, industry standard 330kV substation that facilitates the connection of the Power Station will be estimated.
  - (b) The estimate will include all the components and costs associated with a standard substation.
  - (c) The estimated cost will be based on a generic three breaker mesh substation configured in a breaker and a half arrangement.
  - (d) The substation will be located adjacent to an existing transmission line and include an allowance for 2km of 330kV overhead single circuit line to the power station that will have one road crossing.
  - (e) It shall be assumed that the transmission connection to the Power Station will be located on 50% flat - 50% undulating land, 50% rural - 50% urban location and there will be no unforeseen environmental or civil costs associated with the development.
  - (f) The connection of the substation into the existing transmission line will be turn-in, turn-out and will be based on the most economical (i.e. least cost) solution. It is assumed that the existing transmission line will not require modification to allow the connection with the exception of one new tower located at the substation to allow a point of connection.
  - (g) Costs associated with any staging works will not be considered.
  - (h) Shallow connection easement costs will be considered.
  - (i) An estimate of deep connection costs shall be included.

#### 1.9. Liquid Fuel Storage and Handling Facilities

- The IMO must determine appropriate and reasonable costs for the Liquid Fuel storage and handling facilities. Costs associated with the following items should be developed:
  - (a) A fuel tank of 1,000 t (nominal) capacity including foundations and spillage bund.
  - (b) Facilities to receive fuel from road tankers.

- (c) All associated pipework, pumping and control equipment.
- 2 The estimate should be based on the following assumptions:
  - (a) Land is available for use and all appropriate permits and approvals for both the power station and the use of liquid fuel have been received.
  - (b) The capacity of the storage tank should be sufficient to allow for 24 hours of continuous operation for a 160 MW open cycle gas turbine power station.
  - (c) Any costing components that may be time-varying in nature must be disclosed as part of the modelling. Such components might be the cost of the liquid fuel, which will vary over time and as a function of exchange rates etc.
- The costing should only reflect fixed costs associated with the Fixed Fuel Cost (FFC) component and should include an allowance for keeping the tank half-full at all times.
- The IMO may engage a consultant to assist the IMO in reviewing and estimating the costs associated with liquid fuel storage and handling facilities.

#### 1.10. Fixed Operating and Maintenance Costs

- The IMO must determine Fixed Operating and Maintenance (O&M) costs for the Power Station and the associated transmission connection works.
- The Fixed O&M costs may be separated into those costs associated with the Power Station, those costs associated with the transmission connection infrastructure and any other major components that are considered likely to be of sufficient magnitude so as to require separate determination.
- 3 Fixed O&M costs shall also include fixed network access and/or ongoing charges.
- To assist in the computation of annualised Fixed O&M costs, the costs associated with each major component shall be presented in 5 year periods covering 1 to 5 years; 6 to 10 years; 11 to 15 years; 16 to 20 years; 21 to 25 years; 26 to 30 years; 31 to 35 years; 36 to 40 years; 41 to 50 years; 51 to 55 years; and 56 to 60 years as required respectively.
- The Fixed O&M costs associated with each major component shall be converted into an annualised Fixed O&M as required in the determination methodology section (1.14).
- The IMO may engage a consultant to assist the IMO in reviewing and estimating the Fixed O&M costs.

#### 1.11. Land Costs

- The IMO shall retain Landgate under a consultancy agreement each year to provide valuations on parcels of industrial land. The regions in which the analysis would be conducted are:
  - (a) Collie Region
  - (b) Kemerton Industrial Park Region
  - (c) Pinjar Region
  - (d) Kwinana Region
  - (e) North Country Region
  - (f) Kalgoorlie Region

These areas represent the regions within the South West interconnected system (SWIS) where generation projects are most likely to be proposed and should provide a broad cross-section of options.

Deleted: S

- The IMO will contract with Landgate to conduct the valuations on the same land parcel size, so as to provide a consistent method of valuing the cost of purchase of the land. The IMO will provide an indication as to the size of land required, which should be limited to the following options:
  - (a) One parcel of land in an industrial area which does not require a significant buffer zone due to its classification. For example. 3 ha.
  - (b) The summation of multiple smaller parcels of land as appropriate to meet the requirements above.
  - (c) One larger parcel of land which includes the requirement of a buffer zone. For example. 30 ha.

#### 1.12. Legal, Financing, Insurance, Approvals and Other Costs

- The IMO shall determine an estimate for the following costs associated with the development of the Power Station project:
  - (a) Legal costs associated with the design and construction of the power station.
  - (b) Financing costs such as debt and equity raising costs not directly covered in the application of the cost of finance the Maximum Reserve Capacity Price.
  - (c) Insurance costs required to insure the replacement of capital equipment and infrastructure. This component shall be computed as part of the determination of the Weighted Average Cost of Capital (WACC).

- (d) Approval cost including environmental consultancies and approvals, and local, state and federal licensing, planning and approval costs;
- (e) Other fixed costs associated with operating and maintaining the Power Station.
- (f) Contingency costs, where this shall be equal to a factor of 0.15.
- The IMO may engage a consultant or consultants to directly estimate costs associated with the provision of Legal Costs, Financing, Insurance and Environmental approval costs.

#### 1.13. Weighted Average Cost of Capital

- The IMO must determine the cost of capital to be applied to various costing components of the Maximum Reserve Capacity Price. This cost of capital shall be an appropriate WACC for the generic Power Station project considered, where that project is assumed to receive Capacity Credits through the Reserve Capacity Auction and be eligible to receive a Long-Term Special Price Arrangement through the Reserve Capacity Mechanism.
- 2 The WACC will be applied directly:
  - (a) In the annualisation process used to convert the Power Station project Capital Cost into an annualised capital cost; and
  - (b) To account for the cost of capital in the time period between when the Reserve Capacity Auction is held (i.e. when capital is raised), and when the payment stream is expected to be realised. To maintain computational simplicity, the nominal time for this period is two years.
- The methodology adopted by the IMO to determine the WACC may involve a number of components that require review. These components will normally be classed as those which require review annually (called Minor components) and those structural components of the WACC which require review less frequently (called Major components).
- The IMO must determine the WACC for the purposes of calculating the Maximum Reserve Capacity Price.
- 5 In determining the WACC, the IMO:

- (a) must annually review the Minor components; and.
- (b) may review the Major components if, in the IMO's opinion, a significant economic event has occurred since undertaking the last 5 yearly review of the Maximum Reserve Capacity Price in accordance with clause 4.16.9 of the Market Rules.
- The IMO may engage a consultant to assist the IMO in reviewing the Major and Minor components of the WACC.
- 7 The IMO shall compute the WACC on the following basis:
  - (a) The WACC shall use the Capital Asset Pricing Model (CAPM) as the basis for calculating the return to equity.
  - (b) The WACC shall be computed on a Pre-Tax basis.
  - (c) The WACC shall use the standard Officer WACC method as the basis of calculation.
- 8 The pre-tax real Officer WACC shall be calculated using the following formulae

$$W\!ACC_{real} = \left( \frac{\left(1 + W\!ACC_{no\min al}\right)}{\left(1 + i\right)} \right) - 1$$
 and

$$WACC_{no \min al} = \frac{1}{\left(1 - t\left(1 - \gamma\right)\right)} R_e \frac{E}{V} + R_d \frac{D}{V}$$

Where:

(a)  $R_e$  is the nominal return on equity (determined using the Capital Asset Pricing Model) and is calculated as:

$$R_e = R_f + \beta_e \times MRP$$

Where:

 $R_f$  is the nominal risk free rate for the Capacity Year;

 $\beta_e$  is the equity beta; and

MRP is the market risk premium.

(b)  $R_d$  is the nominal return on debt and is calculated as:

$$R_d = R_f + DRP$$

Where:

 $R_f$  is the nominal risk free rate for the Capacity Year;

DRP is the debt risk premium for the Capacity Year;

- (c) t is the benchmark rate of corporate income taxation, established at either an estimate effective rate or a value of the statutory taxation rate;
- (d)  $\gamma$  is the value of franking credits;
- (e) E/V is the market value of equity as a proportion of the market value of total assets;
- (f) D/V is the market value of debt as a proportion of the market value of total assets; and
- (g) The nominal risk free rate,  $R_f$ , for a Capacity Year is the rate determined for that Capacity Year by the IMO on a moving average basis from the annualised yield on Commonwealth Government bonds with a maturity of 10 years:
  - using the indicative mid rates published by the Reserve Bank of Australia;

and

- averaged over a 20-trading day period.
- (h) The debt risk premium, DRP, for a Capacity Year is the premium determined for that Capacity Year by the IMO as the margin between the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a BBB+ (or equivalent) credit rating from Standard and Poors and a maturity of 10 years and the nominal risk free rate:
  - using the predicted yields for corporate bonds published by Bloomberg; and the nominal risk free rate calculated as directed above; and
  - the nominal risk free rate and Bloomberg yields averaged over the same 20-trading day period.
- (i) If there are no bonds with a maturity of 10 years on any day in the period referred to in Steps 1.13.8(g) and 1.13.8(h), the IMO must determine the nominal risk free rate and the *DRP* by interpolating on a straight line basis from the two bonds closest to the 10 year term and which also straddle the 10 year expiry date.
- (j) If the methodology used in Steps 1.13.8(i) cannot be applied due to suitable bond terms being unavailable, the IMO may determine the nominal risk free rate and the DRP by means of an appropriate approximation.
- (k) i is the forecast rate of inflation. In establishing a forecast of inflation, the IMO is to have regard to the forecasts of the Reserve Bank of Australia, the Western Australian Department of Treasury and Finance, and financial market participants.
- 9 The CAPM shall use the following parameters as variables each year.

CAPM Parameter	Notation/Determination	Component	<u>Value</u>
Nominal risk free rate of return (%)	$R_f$	Minor	TBD
Expected inflation (%)	$\pi_{ m e}$	Minor	TBD
Real risk free rate of return (%)	$R_{ m fr}$	Minor	TBD
Market risk premium (%)	MRP	Major	6.00
Asset beta	$\beta_a$	Major	<u>0.5</u>
Equity beta	$\mathrm{B}_{\mathrm{e}}$	Major	0.83
Debt margin (%)	DM	Minor	TBD
Debt issuance costs (%)	d	Minor	TBD
Corporate tax rate (%)	t	Major	<u>30</u>
Franking credit value	γ	Major	<u>0.5</u>
Debt to total assets ratio (%)	D/V	Major	<u>40</u>
Equity to total assets ratio (%)	E/V	Major	<u>60</u>

#### 1.14. Determination of the Maximum Reserve Capacity Price

1 The IMO shall use the following formulae to determine the Maximum Reserve Capacity Price:

The Maximum Reserve Capacity Price to apply for a Reserve Capacity Auction held in calendar year t is PRICECAP[t] where this is to be calculated as:

PRICECAP[t] = (ANNUALISED\_FIXED\_O&M[t] + ANNUALISED\_CAPCOST[t] / (CAP / SDF))

Where:

PRICECAP[t] is the Maximum Reserve Capacity Price to apply in a Reserve Capacity Auction held in calendar year t;

ANNUALISED\_CAPCOST[t] is the CAPCOST[t], expressed in Australian dollars in year t, annualised over a 15 year period, using a Weighted Average Cost of Capital (WACC) as determined as part of the Maximum Reserve Capacity Price Market Procedure and updated as required;

CAP is the capacity of an open cycle gas turbine, expressed in MW, and equals 160MW;

SDF is the summer derating factor of a new open cycle gas turbine, and equals 1.18;

Deleted: using a

CAPCOST[t] is the total capital cost, expressed in million Australian dollars in year t, estimated for an open cycle gas turbine power station of capacity CAP; and

ANNUALISED\_FIXED\_O&M[t] is the annualised fixed operating and maintenance costs for a typical open cycle gas turbine power station and any associated electricity transmission facilities, expressed in Australian dollars in year t, per MW per year.

The value of CAPCOST[t] is to be calculated as:

 $CAPCOST[t] = (PC[t] \times (1 + M) \times CAP + TC[t] + FFC[t] + LC[t]) \times (1 + WACC)^{2}$  Where:

PC[t] is the capital cost of an open cycle gas turbine power station in year t, expressed in Australian dollars in year t per MW;

M is a margin to cover legal, approval, and financing costs and contingencies;

TC[t] is the cost of electricity transmission assets required to connect an open cycle gas turbine power station to the SWIS, plus an estimate of the costs of augmenting the shared network to facilitate the connection of the open cycle gas turbine power station, expressed in Australian million dollars in year t;

FFC[t] is the fixed fuel costs and must represent the fixed costs associated with an on-site liquid storage tank with sufficient capacity for 24 hours of Liquid Fuel including the cost of keeping this tank half full at all times expressed in Australian million dollars in year t;

LC[t] is the cost of land purchased in year [t]; and

WACC is the Weighted Average Cost of Capital.

- Once the IMO has determined a revised value for the Maximum Reserve Capacity Price, the IMO must publish a draft report describing how it has arrived at proposed revised value [MR4.16.6]. In preparing the draft report, the IMO must include details of how it has arrived at any proposed revised values for the Major and Minor components used in calculating the WACC\_if they have been changed since the previous Major Review.
- The IMO must publish the draft report on the Market Web-site and advertise the report in newspapers widely distributed in Western Australia and request submissions from all sectors of the Western Australian energy industry, including end users.

Deleted:

#### 1.15. Major Review

- In accordance with clause 4.16.9, the IMO must conduct a review of the methodology used to determine the Maximum Reserve Capacity Price at least once every five years ("Major Review"). This process will review the basis for determining the Maximum Reserve Capacity Price, the structural methodology by which the Maximum Reserve Capacity Price is computed each year and the method the IMO uses to estimate each of the constituent components of the Maximum Reserve Capacity Price.
- For annual reviews carried out between Major Reviews the IMO must use the same methodology as it used in the most recent Major Review. However, where the IMO considers that any of the comparator companies used in the most recent Major Review are no longer available or that its characteristics have significantly changed, the IMO may select a different set of comparator companies, applying the following criteria:
  - (a) the company must be a power generator, energy transmitter or distributor;
  - (b) market capitalisation must be more than \$200m AUD; and
  - (c) the company must be listed on Bloomberg.

#### Maximum Reserve Capacity Price Basis

- The basis of determining the Maximum Reserve Capacity Price shall be reviewed by the IMO with particular reference to the following factors:
  - (a) The type of power station
  - (b) The size of the power station
  - (c) The expected load factor of the power station
  - (d) Primary and secondary fuel types of the power station.
- The above review must give consideration to the Wholesale Electricity Market Objectives.

#### Power Station

- In accordance with Market Rule 4.16.9, the IMO must conduct a review of the definition of the Power Station and its associated components. The IMO is required to take into consideration the following factors:
  - (a) The method used to determine the Power Station price
  - (b) The summer derating factor applied to the Power Station
  - (c) The capacity factor of the Power Station.

#### Transmission Connection

- In accordance with Market Rule 4.16.9, the IMO must conduct a review of the type of connection used to connect the Power Station to the bulk transmission network. The IMO is required to take into consideration the following factors:
  - (a) Which part of the bulk transmission system the Power Station will be connected to (eg 330kV / 220 kV/ 132 kV).
  - (b) Land use type assumptions (rural/urban options).
  - (c) The switchyard configuration.
  - (d) The number of road crossings.

#### Fixed Fuel Costs

In accordance with Market Rule 4.16.9 the IMO must conduct a review of the fixed fuel costs with direct reference to the outcome of the review of the Maximum Reserve Capacity Price in Step 1.15.3 above.



MARKET PROCEDURE: Reserve Capacity Performance Monitoring

**VERSION 3** 



#### **ELECTRICITY INDUSTRY ACT 2004**

## ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

#### WHOLESALE ELECTRICITY MARKET RULES

#### **COMMENCEMENT:**

This Market Procedure took effect from 8:00am (WST) on the same date as the Wholesale Electricity Market Rule, in which this Procedure is made in accordance with, commences.

#### **VERSION HISTORY**

VERSION	EFFECTIVE DATE	NOTES	
1	21 September 2006	2006 Market Procedure at Market Start	
2	15 October 2008	Amendments to Market Procedure resulting from PC_2008_07	
3	Xx Xxx 2010	Amendments to Market Procedure resulting from PC_2010_05	



#### **CONTENTS**

1. PROCEDURE OVERVIEW	1
1.1 Relationship with the Market Rules	1
1.2 Purpose	1
1.3 Application	1
1.4 Associated Market Procedures	1
1.5 Interpretation	1
2. PROCEDURE STEPS	2
2.1 Steps to be followed by the IMO to perform	n Reserve Capacity monitoring 2
2.2 Steps to be undertaken by Market participa	ants if issued with a request for a Reserve
Capacity Performance report	4
2.3 Report format required in the case that a N	Narket Participant is required to provide a
Reserve Capacity Performance Report	5
2.4 Steps to be followed by the IMO in respect	of Reserve Capacity Progress Reports 6
2.5 Steps to be undertaken by the Market Part	icipant for Reserve Capacity Progress
Reports	7
2.6 Supporting Evidence that the IMO may req	uest from a Market Participant8
2.7 Steps that are to be Undertaken by the Ma	rket Participant in response to a request
by the IMO for additional supporting evide	nce9



#### 1. PROCEDURE OVERVIEW

#### 1.1 Relationship with the Market Rules

- 1.1.1 This Reserve Capacity Performance Monitoring Procedure (Procedure) should be read in conjunction with clause 4.27.12 of the Wholesale Electricity Market (WEM) Rules (Market Rules).
- 1.1.2 Reference to particular Market Rules within the Procedure in bold and square brackets [MR XX] are current as of 1 July 2010. These references are included for convenience only, and are not part of this Procedure.

#### 1.2 Purpose

1.2.1 The purpose of the Procedure is to describe the steps for performing the Reserve Capacity monitoring obligations required under the Market Rules.

#### 1.3 Application

- 1.3.1 This Procedure applies to:
  - a) the IMO in conducting Reserve Capacity Performance Monitoring;
  - b) System Management; and
  - c) Market Participants in complying with Reserve Capacity Performance requirements.

#### 1.4 Associated Market Procedures

- 1.4.1 The following Market Procedures are associated with this Procedure:
  - a) Capacity Credit Allocation;
  - b) Reserve Capacity Security; and
  - c) Reserve Capacity Testing.

#### 1.5 Interpretation

- 1.5.1 In this Procedure, unless the contrary intention is expressed:
  - a) terms used in this Procedure have the same meaning as those given in the Market Rules;



- b) to the extent that this Procedure is contrary or inconsistent with the Market Rules, the Market Rules shall prevail to the extent of the inconsistency;
- a reference to the Market Rules or Market Procedures includes any associated forms required or contemplated by the Market Rules or Market Procedures; and
- d) words expressed in the singular include the plural or vice versa.
- e) "Good industry practice" means the exercise of that degree of skill, diligence, prudence and foresight that a skilled and experienced person would reasonably and ordinarily exercise under comparable conditions and circumstances consistent with applicable written laws and statutory instruments and applicable recognised codes, standards and guidelines;
- f) "Reserve Capacity Performance Report" means a report provided by a Market Participant at the Request of the IMO for the purposes of Reserve Capacity Monitoring; and
- g) "Reserve Capacity Progress Report" means a report provided by a Market Participant in respect of a Facility that is yet to enter Service and provided for the purpose of Reserve Capacity progress monitoring; and
- h) an "Authorised Person" is a Director or Officer as defined by the *Corporations Act 2001*.

#### 2. PROCEDURE STEPS

#### 2.1 Steps to be followed by the IMO to perform Reserve Capacity monitoring

- 2.1.1 The IMO must monitor the total availability of capacity in the South West interconnected system (SWIS) on a daily basis. The total available capacity should equal [MR 4.27.1]:
  - a) the total Capacity Credits held by Market Participants on that day; less
  - b) the maximum amount of capacity unavailable at any time due to Planned Outages.
- 2.1.2 By the twenty fifth day of each month, the IMO must assess the number of days in the preceding 12 calendar months where the total available capacity in the SWIS dropped below 80% (during the Hot Season), and 70% (in either the Intermediate Season or Cold Season), of the total Capacity Credits held by Market Participants for more than six hours on the day [MR 4.27.2].



- 2.1.3 The assessment referred to in step 2.1.2 takes into account both Forced and Planned Outages.
- 2.1.4 The IMO may use the WEMS to conduct the Reserve Capacity Monitoring process in steps 2.1.1 and 2.1.2.
- 2.1.5 If the number of days determined in accordance with step 2.1.2 exceeds 40, then the IMO must require reports to be filed by those Market Participants holding Capacity Credits for each Facility which [MR 4.27.3]:
  - a) has been unavailable due to Planned Outages for more than 1000 hours during the preceding 12 calendar months; and
  - b) has not been included in such a report during the preceding 12 calendar months.
- 2.1.6 If the IMO determines that a report is required by a Market Participant in accordance with step 2.1.5, then within 5 Business Days, the IMO must notify the Market Participant requesting that a report be provided in accordance with this Market Procedure, and in accordance with clause 4.27 of the Market Rules.
- 2.1.7 The request for a Reserve Capacity Performance Report described in step 2.1.5 must include [MR 4.27.4] (see section 2.3):
  - a) A request for explanations of all Planned Outages taken by the Facility in the preceding 12 calendar months [MR 4.27.4(a)]);
  - b) A request for a statement of the expected maximum number of days of Planned Outages to be taken by the Facility in each of the next 24 months commencing from the month in which the report is requested, including adequate explanation to make clear the reason for each Planned Outage [MR 4.27.4(b)];
  - c) A request for measures proposed by the Market Participant to increase the availability of the Facility [MR 4.27.4(c)];
  - d) A request for other information as appropriate; and
  - e) A time by which the report is required to be submitted, which must be set in accordance with step 2.1.8.
- 2.1.8 A Market Participant must provide a Reserve Capacity Performance Report described in step 2.1.5, to the IMO in a format specified in the section 2.3 within 20 Business Days of being requested to do so [MR 4.27.5].
- 2.1.9 The IMO must consult with System Management on the implications of a Reserve Capacity Performance Report [MR 4.27.6].



2.1.10 If the IMO considers the number of days reported in accordance with step 2.1.7 b) to be unjustified based on good industry practice, it may, at its sole discretion limit the number of days on which Planned Outages are to be taken by the Facility in each of the next 24 months to the level determined to represent Good Industry Practices for the purposes of step 2.1.11 and 2.1.12 and must notify the Market Participant who filed the report described in step 2.1.5 of the limit [MR 4.27.7].

Note: The limit is NOT on the number of days that Planned Outages can occur, but on the number of days that Planned Outages can be taken while being exempt for Capacity Credit Refund payments (and only when clause 4.27.9 applies) This section is not intended to restrict the ability of a Market Participant to request a Planned Outage.

- 2.1.11 If the IMO limits the number of days in accordance with step 2.1.10, then the modified value is to supersede the corresponding value specified in the report described in step 2.1.7 [MR 4.27.8].
- 2.1.12 If the number of days determined in accordance with step 2.1.2 exceeds 80, then the IMO must [MR 4.27.9]:
  - a) notify all Market Participants that this has occurred; and
  - b) during the 12 months commencing from the first Trading Day of the following month, cease to adjust Reserve Capacity Obligation Quantities under clause 4.12.6(b) of the Market Rules in response to Planned Outages for Facilities:
    - i) referred to in step 2.1.5; and
    - ii) for which the number of days of Planned Outage during that 12 month period has exceeded the total number of days of Planned Outage predicted for that 12 month period in accordance with step 2.1.7 b), as modified by step 2.1.11.
- 2.2 Steps to be undertaken by Market Participants if issued with a request for a Reserve Capacity Performance Report
- 2.2.1 If a Market Participant is provided with a request for a Reserve Capacity Performance Report by the IMO, the Market Participant must:
  - a) Provide a Reserve Capacity Performance Report to the IMO within 20 Business Days from the date the request is issued to the Market Participant [MR 4.27.5].
  - b) Provide the Reserve Capacity Performance Report using the format detailed in section 2.3.



### 2.3 Report format required in the case that a Market Participant is required to provide a Reserve Capacity Performance Report

Reports provided by Market Participants in accordance with clause 4.27 of the Market Rules and in accordance with this Market Procedure must be provided using the format listed in the following procedure steps.

- 2.3.1 Reports provided in accordance with this Procedure must be provided by the Market Participant in writing.
- 2.3.2 Reports provided in accordance with this Procedure must be signed by an Authorised Person from the Market Participant's company.
- 2.3.3 Sections to be included in the Reserve Capacity Performance Report include:
  - a) Section 1 Details of the Facility as appropriate;
  - b) Section 2 explanations of all Planned Outages taken by the Facility in the preceding 12 calendar months [MR 4.27.4(a)];
  - c) Section 3 a statement of the expected maximum number of days of Planned Outages to be taken by the Facility in each of the next 24 months commencing from the month in which the report is requested, including adequate explanation to make clear the reason for each Planned Outage [MR 4.27.4(b)];
  - d) Section 4 measures proposed by the Market Participant to increase the availability of the Facility [MR 4.27.4(c)];
  - e) Section 5 other information as deemed appropriate by the Market Participant; and
  - f) Section 7 Declaration including the following text:

Declaration	
(This needs to be made by a person within your organisation with the appropriate level of authority, such as a Director or Company Secretary)	
On behalf of (Company or business name),	
I declare that the above information provided in respect to this RC Performance Report is accurate.	
Signed	



Fax no:

Person making declaration:
Position held in company or business:
Postal address:
Phone:
Email address:

### 2.4 Procedure Steps to be followed by the IMO in respect of Reserve Capacity Progress Reports

While the following procedure steps relate to facilities that are yet to enter service, they are included in this performance monitoring section as the IMO has to be able to monitor their performance in achieving the schedule in clause 4.10.1(c)(iii) of the Market Rules.

Note that the disincentive for being late with a Facility is that the Market Participant operating the Facility will have to refund Reserve Capacity payments in accordance with clause 4.26 of the Market Rules until the Facility is operating and if the Facility is too late, it can lose its Reserve Capacity Security Deposit.

- 2.4.1 Market Participants holding Capacity Credits for Facilities that are yet to commence operation must file a report on progress with the IMO at least once every three months from the date the Capacity Credit is confirmed under clause 4.20 of the Market Rules [MR 4.27.10].
- 2.4.2 Market Participants holding Capacity Credits for Facilities that are yet to commence operation must file a report on progress with the IMO at least once every month between the commencement of the calendar year in which the date referred to in clause 4.10.1(c)(iii)(7) of the Market Rules falls and the date IMO has notified the Market Participant, in accordance with clause 4.13.10 of the Market Rules, that the need to maintain the Reserve Capacity Security for the Facility has ceased [MR 4.27.10A].
- 2.4.3 The IMO must publish on its website (<u>www.imowa.com.au</u>) a copy of the Reserve Capacity Progress Report Template and Market Participants must use that template.
- 2.4.4 On receiving a Reserve Capacity Progress Report, the IMO must determine if all details and information have been completed.
- 2.4.5 If the IMO determines that all appropriate information has not been completed, the IMO may contact the Market Participant and request further or clarifying information.



- 2.4.6 If the IMO determines that the information provided by the Market Participant is insufficient, the IMO may then request additional supporting information in accordance with clause 4.27.11D and section 2.5 of this Procedure.
- 2.4.7 The report described in step 2.4.1 must include the current revised estimates of each date to which clause 4.10.1(c)(iii) of the Market Rules refers [MR 4.27.11].
- 2.4.8 Once the IMO has determined that the report contains all relevant information, the IMO must make an assessment as to whether there are changes to the information listed in the Reserve Capacity Progress Report and if any changes impact on the likely progress of the Facility with respect to meeting any Reserve Capacity Obligations.
- 2.4.9 The IMO may consult with System Management as required regarding the Reserve Capacity Progress Report.
- 2.4.10 The IMO may use the information contained in any Reserve Capacity Progress Report to determine the start date of any applicable Reserve Capacity Obligations associated with that Facility.
- 2.4.11 The IMO may use the information contained in any Reserve Capacity Progress Report to trigger a Reserve Capacity Test under section 4.25 of the Market Rules (if appropriate).
- 2.5 Procedure Steps to be undertaken by the Market Participant for Reserve Capacity Progress Reports
- 2.5.1 Market Participants holding Capacity Credits for Facilities that are yet to commence operation must file a report on progress with the IMO at least once every three months from the date the Capacity Credit is confirmed under clause 4.20 of the Market Rules [MR 4.27.10].
- 2.5.2 Market Participants holding Capacity Credits for Facilities that are yet to commence operation must file a report on progress with the IMO at least once every month between the commencement of the calendar year in which the date referred to in clause 4.10.1(c)(iii)(7) of the Market Rules falls and the date IMO has notified the Market Participant, in accordance with clause 4.13.10 of the Market Rules, that the need to maintain the Reserve Capacity Security for the Facility has ceased [MR 4.27.10A].
- 2.5.3 Market Participants may provide the IMO with Reserve Capacity Progress Reports on a more frequent basis than is detailed in step 2.5.1.
- 2.5.4 The report described in step 2.5.1 must include the current revised estimates of each date to which clause 4.10.1(c)(iii) refers [MR 4.27.11].



- 2.5.5 The Reserve Capacity Progress report must be signed by an Authorised Person.
- 2.5.6 The IMO may contact the Market Participant and request additional supporting information. The Market Participant must comply with such requests if made by the IMO.
- 2.5.7 Market Participants must provide the Reserve Capacity Progress Report in the form specified by the IMO, which can be found on the IMO Website (www.imowa.com.au)

#### 2.6 Supporting Evidence that the IMO may request from a Market Participant

- 2.6.1 The IMO may request additional information, in accordance with clause 4.27.11D of the Market Rules, to complete its assessment of whether a Facility will be able to fully meet its Reserve Capacity Obligations by a nominated date.
- 2.6.2 If the IMO requires additional information or evidence, it must notify the Market Participant in writing within 5 Business Days of receiving the progress report and list the information to be submitted to the IMO.
- 2.6.3 Supporting evidence that may be requested by the IMO may include, but not be limited to:
  - a) Network access agreements;
  - b) Local government approvals;
  - c) Evidence of execution of fuel supply and transport contracts;
  - d) Evidence of Financial Approvals;
  - e) Relevant Construction and Operational Licenses;
  - f) Independent construction schedules for the plant, network and fuel supply facilities;
  - g) Repair and/or rework schedules;
  - h) Photographs of construction works;
  - i) Evidence of Environmental Test completion;
  - j) Evidence of network connection tests completion as indicated in the Network Access Code;
  - k) Full load testing results;



- I) Practical completion certificates;
- m) Quality assurance certificates; and
- n) Sign-off at an "Authorised" Level.
- 2.6.4 The IMO may take whatever reasonable steps that are required to determine the accuracy of information provided to it under step 2.6 and step 2.7 of this Procedure.
- 2.6.5 The IMO may request additional information, evidence or clarification in respect of the information provided in accordance with step 2.6.3 and this Procedure.
- 2.6.6 Once the IMO has determined that the additional information provided is appropriate and relevant, the IMO must make an assessment as to whether the information may impact on the likely progress of the Facility with respect to meeting any Reserve Capacity Obligations and the nominated date for commencing the obligations.
- 2.6.7 The IMO may use the additional information to determine whether it should approve the start date of any applicable Reserve Capacity Obligations associated with that Facility.
- 2.6.8 If the IMO is not provided with the requested additional information from the Market Participant, the IMO may decide not to approve the nominated date for commencing the Reserve Capacity obligations.
- 2.6.9 If the IMO does not approve the nominated date, the date will be the date that Reserve Capacity Obligations apply as stipulated in clause 4.1.26 of the Market Rules.
- 2.7 Procedure steps that are to be Undertaken by the Market Participant in response to a request by the IMO for additional supporting evidence



- 2.7.1 If a Market Participant is requested to provide additional information for the IMO's assessment of whether its Facility will complete its Commission Tests by a nominated date, the Market Participant must provide the requested information to the IMO within 5 Business Days from the date the request is issued to the Market Participant.
- 2.7.2 The Market Participant may provide reasons to the IMO as to why any information or evidence cannot be provided by the requested time, however, failure to provide information or evidence may influence the IMO's ability to approve any nominated dates.
- 2.7.3 The letter providing the additional information must be signed by an appropriately Authorised person.



### Agenda Item 10: Market Procedure for Reserve Capacity Security

#### 1. BACKGROUND

The IMO has received an enquiry from at least one Market Participant wishing to satisfy its Reserve Capacity Security obligation by providing more than one Bank Undertaking.

Under all circumstances, the Reserve Capacity Security is either returned to the Market Participant in full or is forfeited in full, dependent upon the Facility satisfying the performance requirements outlined in sections 4.13.10 and 4.13.11 of the Market Rules. No situation can arise where the IMO must decide which security to draw upon.

The IMO has reviewed the Market Rules and the Market Procedure for Reserve Capacity Security and has decided that accepting more than one Bank Undertaking is allowed under both the Market Rules and the Market Procedure. However, the IMO sees value in explicitly stating this possibility in the Market Procedure.

#### 2. UPDATE TO THE MARKET PROCEDURE

The IMO proposes to update step 1.7.2 of the Market Procedure for Reserve Capacity Security as per below:

### 1.7. Procedure steps to be followed by the Market Participant required to provide Reserve Capacity Security

- 2. The Market Participant can provide the Reserve Capacity Security in accordance with clause 4.13.5(a) of the Market Rules by:
  - (a) Bank Undertaking in accordance with the procedures detailed in Market Procedure step 1.8;
  - (b) Guarantee in accordance with the procedures detailed in Market Procedure step 1.9; or
  - (c) The Market Participant may request the IMO to consent to the Market Participant providing its Reserve Capacity Security as a cash deposit ("Security Deposit"). If the IMO, in its absolute discretion, consents, the Market Participant must provide the Security Deposit in accordance with the procedures detailed in Procedure step 1.11.

The Market Participant may provide the Reserve Capacity Security by a combination of one or more of the forms above, provided that the total amount is equal to the amount specified in clause 4.13.2 of the Market Rules.

In addition, the IMO notes that the entire Market Procedure will be updated as part of the wider Market Procedure Project and presented to the IMO Procedure Change and Development Working Group for discussion prior to formal submission into the Procedure Change Process.