ELECTRICITY INDUSTRY ACT

ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

WHOLESALE ELECTRICITY MARKET RULES

Power System Operation Procedure: Facility outages

Version histor	Y	
21 September 2006	Power System Operation Procedure (Market Procedure) for Facility Outages	<u>s</u>
1 April 2009	System Management amended changes to the procedure resulting from Procedure Change Report PPCL 0003	
21 June 2011	System Management amended changes to the procedure resulting from Procedure Change Report PPCL 0017	
20 January 2012	System Management amended changes to the procedure resulting from Procedure Change Report PPCL 0023	

TABLE OF CONTENTS

Rela	ations	hip with Market Rules	4		
Rela	ated c	documents	4		
Cor	Commencement				
1	Scope				
2	Communications and contacts				
	2.1	Participant Contacts	5		
	2.2	System Management Contacts	5		
	2.3 Appr	Communication and publication of Outage Plans, Schedules and ovals	5		
3	SWIS	S equipment list	5		
4	Outa	Outage Schedule			
5	Outa	Outage Plans			
	5.1	Changes to an Outage Plan	7		
	5.2	Outage Plans lodged within the final six weeks	7		
	5.3	Grouping of Associated Outage Plans	8		
6	Acceptance of Outage Plans		8		
	6.1	Assessment of Outage Plans	8		
	6.2	Adequacy criteria for assessing the acceptability of Outage Plans	8		
	6.3	Criteria for selection of Outage Plans in event of conflicting Outage Plans	9		
	6.4	Acceptance of non-complying Outage Plan for reasons of System Security 9	y		
7	Char	nges to power system conditions affecting Scheduled Outages	9		

8	Pre-accepted outages		
9	Approval of Scheduled Outages		
10	0 Opportunistic Maintenance		
	10.1	Day-ahead Opportunistic Maintenance	12
	10.2	On-the-day Opportunistic Maintenance	12
11	Outage	e Recalls	12
12	Submission of Forced Outages and Consequential Outages		13
13	Forced	Outage and COnsequential Outage information for the IMO	14

RELATIONSHIP WITH MARKET RULES

- 1. This Procedure has been developed in accordance with, and should be read in conjunction with, the Wholesale Electricity Market Rules (Market Rules).
- 2. References to particular Market Rules within the Procedure in bold and square brackets [MR XX] are current as 5 December 2011. These references are included for convenience only, and are not part of this procedure.
- 3. This Power System Operating Procedure is subservient to the Market Rules. In the event of conflict between this Procedure and the Market Rules or any other document, the order of precedence is as set out in the Market Rules [MR 1.5.2]
- 4. This Power System Operating Procedure may include explanatory text, including quotations from the Market Rules. Such explanatory text is for information only, does not form part of the Procedure, and is italicised and contained in a rectangular box.
- A word or phrase defined in the Electricity Industry Act 2004, or in the Regulations or Market Rules made under that Act, has the same meaning when used in this Procedure.

RELATED DOCUMENTS

- 1. This document is related to, and should be read in conjunction with, the following documents:
 - a. Power System Operation Procedure Communications and control
 - b. Power System Operation Procedure Commissioning and testing
 - c. Power System Operation Procedure Power system security

COMMENCEMENT

1. This market procedure replacement has effect from the date of commencement of Rules Change Proposal RC 2011 10.

8813510v6 (20/01/12) SYSTEM MANAGEMENT Page 4 of 14

1 SCOPE

- The Power System Operation Procedure: Facility Outages details procedures that System Management and Rule Participants must follow when planning for an outage of a Network, Generation, Load or Ancillary Service Facility.
- The Facility Outage Procedure details the processes that enable Market
 Participants and Network Operators to gain agreement with System
 Management on the timing of outages of facilities; to resolve possible conflicts
 between Outage Plans of different participants and assist System
 Management in the management of system security.

2 COMMUNICATIONS AND CONTACTS

2.1 Participant Contacts

- Depending on the circumstances, System Management may communicate directly with participants or request participants to seek resolution amongst themselves.
- Market Participants and Network Operators must provide System
 Management with the communication details of the operating person(s) authorised to submit Outage Plans and outage cancellations for each of their facilities.
- System Management must maintain a record of details as advised above and make them available to Market Participants and involved parties on an as needed basis.

2.2 System Management Contacts

1. System Management must from time to time advise Market Participants and Network Operators of its contact details and modes of communication in respect of outages.

2.3 Communication and publication of Outage Plans, Schedules and Approvals

 Communication of outage notices and schedules shall be made through System Management's Market Information Technology System ("SMMITS") web interface or as, unless otherwise directed by System Management from time to time.

3 SWIS EQUIPMENT LIST

The Market Rules [MR 3.18.2(a)&(b)] require System Management to compile and maintain a list of all equipment in the SWIS that is subject to outage scheduling by System Management.

1. In addition to the requirements of the Market Rules [MR 3.18.2(c)] the list of equipment must include:

8813510v6 (20/01/12) SYSTEM MANAGEMENT Page 5 of 14

- a. all network circuits that could affect the output from a generating or DSM Facility during a planned outage of that circuit; and
- d. all EGC generating units; and
- all Non-EGC generating facilities with output ratings in excess of 10MW;
 and
- f. any facilities contracted to provide Ancillary Services that are not covered by the above.
- 2. Generators and loads with a name plate capacity rating less than 10MW may be included in the equipment list, where outage scheduling is required for the maintenance of Power System Security and Power System Reliability, as specified in the Market Rules [MR 3.18.2A].
- System Management must consider the following factors in making a decision on including or excluding the equipment:
 - a. the safety of equipment, personnel and the public; and
 - g. Power System Security and Power System Reliability.

4 OUTAGE SCHEDULE

The requirements for System Management to maintain an outage schedule, containing information on all Scheduled Outages are specified in the Market Rules [MR 3.18.4].

- The Outage Schedule must contain a list of all accepted and approved outages.
- 2. The Outage Schedule must contain the identity of the item of equipment and the planned starting and completion times of each Outage Plan accepted by System Management, up to three years ahead.

The Market Rules [MR3.18.5D] specify that System Management may disclose information from the outage schedule to a Network Operator to coordinate outage timings.

5 OUTAGE PLANS

- 1. System Management must accept an Outage Plan that:
 - a. contains the information specified submitted the Market Rules [MR 3.18.6]; and
 - b. is submitted in accordance with the requirements of this Procedure-; and

Acceptance of an Outage Plan denotes acknowledgement by System Management only that the Outage Plan meets the requirements for a valid submission.

- c. meets the criteria for evaluating outage plans in MR3.18.11.
- 2. Market Participants and Network Operators must submit all outage plans and requests for on-the-day and day-ahead Opportunistic Maintenance through

8813510v6 (20/01/12) SYSTEM MANAGEMENT Page 6 of 14

SMMITS or as otherwise directed from time to time by System Management.in accordance with paragraph 2.3.1.

- System Management may require the Participant to clarify or provide additional information in relation to an accepted outage plan prior to Approval of the Outage Plan.
- 4. The time of lodgement of the Outage Plan shall be deemed as the time when the outage plan is transmitted to System Management and an acknowledgement of the submission has been provided.

5.1 Changes to an Outage Plan

The requirements for Market Participants or Network Operators to confirm or revise plans to remove from service or de-rate an item of equipment are specified in the Market Rules [MR 3.18.7, MR 3.18.8 and MR 3.18.9].

- 1. A Market Participant or Network Operator wishing to change or withdraw an Outage Plan pursuant to [MR 3.18.8] or [MR 3.18.9] must:
 - a. if the Outage is planned to commence within 24 hours, inform System
 Management by telephone as soon as practicable and provide
 confirmation through SMMITS or as otherwise as directed from time to
 time by System Managementin accordance with paragraph 2.3.1; or
 - h. otherwise, inform System Management through SMMITS or as otherwise as directed from time to time by System Management.
- If changes in outage plans are minor and do not materially impact power system security or other outage plans, and do not change the timing of the outage, System Management may accept these changes without requiring the plan to be resubmitted.

Note that it is the Market Participant's responsibility to ensure their Balancing Submissions are consistent with their Outage Plans at all times.

5.2 Outage Plans lodged within the final six weeks

The requirements applying to an Outage Plan first submitted within 6 weeks of the commencement time of the outage are specified in the Market Rules [MR 3.18.7A].

- In assessing whether to reject an Outage Plan pursuant to [MR 3.18.7A], System Management must take into account:
 - a. If the Outage Plan arises from a need to carry out relatively urgent and unforeseen maintenance on its Facility, when the Market Participant or Network Operator became aware of the need; and
 - Whether the nature of the work to be carried out on the Facility makes it difficult to plan times accurately ahead, or the work is contingent on actions outside the control of the Market Participant or Network Operator.
- 2. When System Management is unable to assess an Outage Plan in the time available, System Management may reject the Outage Plan and require the Market Participant or Network Operator to resubmit the Outage Plan.

8813510v6 (20/01/12) SYSTEM MANAGEMENT Page 7 of 14

5.3 Grouping of Associated Outage Plans

The requirements for Market Participants and Network Operators to coordinate outages are specified in the Market Rules [MR 3.18.5C].

1. In the situation where a close interdependency exists between outages on multiple Facilities, System Management must assess the associated Outage Plans together and may approve, review or reject the group as a whole.

6 ACCEPTANCE OF OUTAGE PLANS

6.1 Assessment of Outage Plans

- 1. A Market Participant or Network Operator must make application for the acceptance of an outage plan via SMMITS unless otherwise directed from time to time by System Management.
- 2. System Management must use reasonable endeavours to respond to a request for a Proposed Outage Plan received from a Market Participant or Network Operator within 10 business days of receipt of a generation plan and within 20 business days of receipt of a transmission plan.
- System Management must take all reasonable steps to expedite assessments of all submitted Outage Plans.

6.2 Adequacy criteria for assessing the acceptability of Outage Plans

- System Management must assess the acceptability of Outage Plans using the criteria specified in the Market Rules [MR 3.18.11 and MR 3.18.12], based on the information specified in the Power System Operating Procedure: Power System Security.
- Acceptance by System Management of an Outage Plan must be based on the 2nd standard deviation (SD) PASA load forecast as specified in MR3.18.11(a).

Due to the fact that, during summer, the 2nd SD of the weather adapted load forecast may exceed the 2nd SD of the PASA load forecast, an outage in the summer period is only accepted conditionally. However, this does not imply that the outage can or will be approved. Due to the variability of summer loads the final assessment is normally carried out 2 days prior to the scheduled outage commencement. This is because the assessment must be based on the more reliable weather adapted load forecast. To increase the likelihood of approval, participants are advised to plan long duration outages to occur outside of the summer months, which is typically from 1st December to the end of March.

System Management may find an Outage Plan to be acceptable, acceptable under some circumstances, or not acceptable. The actions System Management is required to take in each case are specified in the Market Rules [MR 3.18.13].

8813510v6 (20/01/12) SYSTEM MANAGEMENT Page 8 of 14

6.3 Criteria for selection of Outage Plans in event of conflicting Outage Plans

System Management must adhere to the criteria for the selection and prioritisation of outage plans as specified in the Market Rules [MR 3.18.14].

 System Management must notify all affected Market Participants and Network Operators of any decision made pursuant to [MR 3.18.14] via SMMITS or as otherwise directed, and must use reasonable endeavours to confirm its decision by telephone.

6.4 Acceptance of non-complying Outage Plan for reasons of System Security

The Market Rules provide for System Management to permit an Outage Plan to proceed even if it does not meet the criteria for acceptance as specified in the Market Rules [MR 3.18.11(e)].

This situation could, for example, arise in relation to outages intended to address ongoing plant unreliability.

- Where an Outage Plan does not meet the criteria for acceptance specified in Paragraph <u>6.2.1 above</u> System Management may still accept the Outage Plan if it considers that the increased security risk over the period of the outage is less than the longer-term risk reduction that would be achieved by allowing the outage to go ahead.
- If System Management accepts an Outage Plan pursuant to Paragraph <u>6.4.1</u> <u>above</u>, System Management must document its estimation of the extent of the risk including the likelihood and consequences, and ongoing advantages that arise over the longer term, as a result of accepting an Outage Plan.

7 CHANGES TO POWER SYSTEM CONDITIONS AFFECTING SCHEDULED OUTAGES

- Where System Management's forecast of power system conditions for a
 period coinciding with an Outage Plan occurs, such that the Outage Plan
 would no longer meet the criteria for acceptance, System Management may
 withdraw its acceptance of the Outage Plan and either deem that that the
 Outage Plan is unacceptable, or deem that the Outage Plan is acceptable
 under certain circumstances.
- Where System Management withdraws its acceptance of an Outage Plan, it
 must inform the relevant Market Participant or Network Operator of its
 decision via SMMITS or as otherwise directed. System Management must
 use reasonable endeavours to confirm its decision by telephone.

8 PRE-ACCEPTED OUTAGES

1. No earlier than 8am on the 7th day prior to the trading day in which the outage commences, a Market Participant may make a request via telephone

8813510v6 (20/01/12) SYSTEM MANAGEMENT Page 9 of 14

- for an outage where this communication may be deemed as a request for Acceptance ('Pre-Accepted Outage').
- Where requesting a Pre-Accepted Outage, a Market Participant must first telephone System Management, where contact details are advised from time to time, and obtain a verbal agreement that there is a likelihood that the request can be approved.
- 3. Following the telephone call in **Paragraph** <u>8.2 above</u> or as otherwise directed, the Market Participant must provide the Proposed Outage Plan via SMMITS or as otherwise directed from time to time by System Management as soon as practicable.
- 4. System Management must apply the approval framework in accordance with Section 100 of this Procedure to the Proposed Outage Plan. Where System Management approves the request, the telephone conversation seeking approval to submit the Pre-Accepted Outage must be deemed as satisfying the request for Acceptance.

9 APPROVAL OF SCHEDULED OUTAGES

The requirements for a Market Participant or Network Operator to request approval of a Scheduled Outage Plan are specified in the Market Rules [MR 3.19.1].

The criteria that System Management must adhere to when assessing whether to grant approval of Scheduled Outage requests are specified in the Market Rules [MR 3.19.6].

- A Market Participant or Network Operator must make application for, and receive, approval of an accepted Outage Plan prior to conducting the Outage referred to in the Outage Plan.
- Where a Market Participant requires an approval of an outage earlier than the two days in advance as specified in MR 3.19.1, the Market Participant may raise a request to System Management. System Management must assess each such request on its own merits.
- 2.3. The application referred to in Paragraph 9.1 above must be made via SMMITS, or as otherwise directed from time to time by System Management.
- At the time the request is made the Market Participant or Network Operators must also advise System Management of any change to the information contained in the Outage Plan.
- 4.5. Before approving a Scheduled Outage request, System Management may at its sole discretion require a Market Participant's or Network Operator's authorised personnel included in the relevant contact list to make a written declaration that the unit is available prior to the outage commencing. System Management must reject any Scheduled Outage request where the relevant Market Participant or Network Operator does not comply with such a request.

Paragraph 9.5 above relates to System Management's right under the Market Rule [MR 3.19.3A(c)] to reject an outage request that it considers to be made principally to avoid exposure to Reserve Capacity refunds.

8813510v6 (20/01/12) SYSTEM MANAGEMENT Page 10 of 14

-6. Notification by System Management of either an approval or rejection of a Scheduled Outage must be made via SMMITS or as otherwise directed,

Formatted: Rules reference Char Char

System Management would consider fuel in evaluating an outage plan only when there is known shortage of fuel to the extent that it may impact on the availability of generators and the security of the system. The fuel shortage can be due to restrictions arising from supply or transportation. When this happens, System Management would confirm the feasibility of its dispatch plans with the relevant market participants. Where the participant confirms the loss of generation due to fuel, System Management would simulate accordingly in PASA.

10 OPPORTUNISTIC MAINTENANCE

Opportunistic Maintenance refers to approved outages that are carried out without previously having been subject to Acceptance. Applications for opportunistic maintenance generally carry a lower probability of acceptanceapproval because more of the factors governing power system security are 'locked in' by the time such an application is made.

The requirements for a Market Participant or Network Operator to request approval of an Opportunistic Maintenance Outage are specified in the Market Rules [MR 3.19.2(a)] ("Day-ahead opportunistic maintenance") and [MR 3.19.2(b)] ("On the day opportunistic maintenance").

The criteria that System Management must adhere to when assessing whether to grant approval for Opportunistic Maintenance Outage requests are specified in the Market Rules [MR 3.19.6].

 System Management must not approve an Opportunistic Maintenance request which would require any change in energy scheduled in accordance with the Forecast BMO, or in scheduled ancillary services.

As a consequence of Paragraph <u>10.1 above</u>, a non-EGC generator cannot have an Opportunistic Maintenance request approved that would result in the generator being unable to perform in accordance with the BMO and latest Forecast BMO.

2. Before approving an Opportunistic Maintenance request System Management may at its sole discretion require a Market Participant's or Network Operator's authorised personnel included in the relevant contact list to make a written declaration that the unit is available prior to the outage commencing. System Management must reject any day-ahead Opportunistic Maintenance request where the relevant Market Participant or Network Operator does not comply with such a request.

Paragraph 10.2 above relates to System Management's right under the Market Rule [MR 3.19.3A(c)] to reject an outage request that it considers to be made principally to avoid exposure to Reserve Capacity refunds.

8813510v6 (20/01/12) SYSTEM MANAGEMENT Page 11 of 14

10.1 Day-ahead Opportunistic Maintenance

- A Market Participant or Network Operator must make application for the approval of a day-ahead Opportunistic Maintenance outage request by telephone, and confirm the request via SMMITS or as otherwise directed from time to time by System Management as soon as practicable.
- System Management must provide confirmation of its approval or rejection via SMMITS efor as otherwise directed as soon as practicable.
- 3. Requests for approval of Day-ahead Opportunistic Maintenance must be processed as follows:
 - Applications made between 10:00 am and 3:30 pm on the day prior to the Scheduling Day must be approved or rejected by 8:00 am on the Scheduling Day; or
 - Applications made between 3:30 pm on the day prior to the Scheduling
 Day and 6:00 am on the Scheduling Day must be approved or rejected by
 8:00 am on the Scheduling Day subject to staff availability, and in any
 case by 12:00 pm on the Scheduling Day; or
 - c. Applications made between 6:00am and 10:00 am on the Scheduling Day must be approved or rejected by 12:00 pm on the Scheduling Day

The time required for processing Day-ahead Opportunistic Maintenance requests varies depending on the complexity of the assessment required. Participants are encouraged to allow as much time as possible as System Management must reject requests that cannot be assessed in the time available.

4.System Management must either approve or reject the day-ahead Opportunistic* Maintenance Outage and inform the Market Participant and Network Operator of its decision before 8:00 am of the Scheduling Day.

5.4. System Management must not approve a request for a day-ahead Opportunistic Maintenance request after 12:00 pm on the Scheduling Day.

10.2 On-the-day Opportunistic Maintenance

- System Management must advise a Market Participant or Network Operator
 of the decision to approve or reject a request for an on-the-day Opportunistic
 Maintenance outage by telephone or as otherwise directed.
- 2. System Management must log all approvals and rejections and the reasons for System Management's decision.

11 OUTAGE RECALLS

When a situation arises where the power system security is at risk and the
cancellation of outages could potentially alleviate the situation, System
Management must consider all current Planned Outages and outages in
progress and assess whether rejecting one or more Planned Outages or
recalling equipment that may assist the situation.

Formatted: Bullets and Numbering

8813510v6 (20/01/12) SYSTEM MANAGEMENT

In a High-Risk Operating State, System Management may cancel or defer planned outages that have not yet commenced. In an Emergency Operating State, System Management may additionally recall to service Facilities that are on outage according to their Outage Contingency Plans.

- 2. If in the view of System Management there is benefit in this action, it may contact the Market Participant or Network Operator and discuss the impact of rejecting the outage or recalling the equipment to service.
- The Market Participant or Network Operator must cooperate with System
 Management and determine when the equipment can be returned to service
 and the best way of proceeding with such action. The Market Participant or
 Network Operator must give this information to System Management as soon
 as practical.
- Market Participants and Network Operators must comply with the directions of System Management to the extent that they are required to do so under the prevailing Operating State.

12 SUBMISSION OF FORCED OUTAGES AND CONSEQUENTIAL OUTAGES

The requirements for Forced or Consequential Outages are specified in the Market Rules [MR 3.21].

- Where equipment is unavailable or de-rated, the relevant Market Participant or Network Operator experiencing the unavailability or de-rating must communicate the nature of that unavailability or de-rating by telephone to System Management as soon as practicable, using contact details that are advised from time to time [MR 3.21.7].
- 2. The relevant Market Participant or Network Operator must, upon request, inform System Management of the equipment's status and provide a good-faith estimate of the likely return to service time.
- 3. The Market Participant or Network Operator must provide a full and final description of the outage to System Management, via SMMITS or as otherwise directed from time to time by System Management, including whether the equipment has suffered a Forced Outage or a Consequential Outage, by midnight on the date specified in the Market Rules [MR 3.21.7].
- 4. If the Market Participant or Network Operator believes the outage suffered is a Consequential Outage, the Market Participant or Network Operator may provide notice from an Authorising Officer (as defined in Corporations Act) to System Management as to why the outage should be considered Consequential within the time limit specified in the Market Rules [MR 3.21.8.]
- 5. Where a Market Participant provides notice in accordance with clause 12.4 above, System Management must determine whether to classify the outage as Consequential in accordance with the requirements of the Market Rules [MR 3.21.2].

Formatted: Default Paragraph Font, Font: Bold

8813510v6 (20/01/12) SYSTEM MANAGEMENT

The Market Rules define a Forced Outage [MR 3.21.1] and a Consequential Outage [MR 3.21.2]. The decisions made by System Management following receipt/no receipt of the notice will be based on the outlines described in [MR7.13.1A(b)].

13 FORCED OUTAGE AND CONSEQUENTIAL OUTAGE INFORMATION FOR THE IMO

- System Management must record the information provided by a Market Participant or Network Operator relating to each Forced Outage and Consequential Outage in accordance with the Market Rules [MR 3.21].
- System Management must communicate this information to the IMO in accordance with the timelines specified in the Market Rules [MR 7.13.1A and MR 7.3.4] and the IMO-System Management Interface Document.
- 3. System Management must only transmit to the IMO Forced Outage and Consequential Outage information it has been advised by a Market Participant or Network Operator in accordance with the Market Rules.

8813510v6 (20/01/12) SYSTEM MANAGEMENT Page 14 of 14