Independent Market Operator

System Management PSOP Working Group

Agenda

Meeting No.	3/2008
Location:	IMO Board Room Level 3, Governor Stirling Tower, 197 St Georges Terrace, Perth
Date:	Tuesday, 4 November 2008
Time:	2:00pm till 4:00pm

Item	Subject	Responsible	Time
1.	**WELCOME AND APOLOGIES / ATTENDANCE**	**System Management**	5 minutes
2.	**MINUTES OF PREVIOUS MEETING / ACTIONS ARISING**	**System Management**	5 minutes
3.	**PSOP: Facility Outages. REVIEW.**	**System Management**	45 minutes
4.	**PSOP: Ancillary Services. REVIEW**	**System Management**	45 minutes
5.	**OTHER BUSINESS** Discussion on any other matters that fall within the scope of the Working Group's Terms of Reference.	**ALL**	15 minutes
6.	**NEXT MEETING** The next PSOP Working Group meeting will be held on 11 December, 2008 from 2:00pm till 4:00pm	**System Management**	5 minutes

ELECTRICITY INDUSTRY ACT

ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

WHOLESALE ELECTRICITY MARKET RULES

Power System Operation Procedure:

Facility Outages

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.

Market Procedures Published by the Minister

I, FRANCIS LOGAN, Minister for Energy for the State of Western Australia, under regulation 9(2) of the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* hereby approve the publication of the Power System Operation: Facility Outages Procedure contained in this document.

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.

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Dated at Perth this … … … day of … … … … …2006.

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1. RELATIONSHIP WITH MARKET RULES

This document sets out in accordance with clauses 3.18 to 3.21 of the Wholesale Electricity Market Rules, the procedures that System Management and Rule Participants must follow in planning for an outage of a network, generation, Curtailable Load or Ancillary Service Facility.

This procedure is made in accordance with Market Rule 3.18.21.

2. SCOPE

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 their facilities; to resolve possible conflicts between with Outage Plans of different Participants and assist System Management in the management of system security.

An overview of the outage processes covered by this procedure document is shown in Appendices V and VI of this procedure.

3. ASSOCIATED PROCEDURES AND OPERATING STANDARDS

The following Operating Procedures are associated with this Power System Outage procedure.

a) Medium Term PASA Procedure
b) Short Term PASA Procedure
c) Power System Operating Procedure – Power System Security.

4. APPLICATION OF OUTAGE PROCEDURE TO FACILITIES

System Management must maintain a list of all equipment covered by this procedure. If a Market Participant's or Network Operator's Facility or an item of equipment forming part of that Facility is on this list, then the Market Participant or Network Operator, as applicable, must schedule outages for the equipment in accordance with this procedure.

4.1 System Management must compile list

1. System Management must compile a list of all equipment on the SWIS that is required to be subject to outage scheduling by System Management. The list must also include equipment for which System Management requires notice of partial outages or de-ratings **[MR 3.18.2].**

2. The list must include:

   a) all transmission network registered facilities;
   b) all registered facilities holding capacity credits, except those to which section 5.6 of this procedure applies;

c) all generating systems associated with an intermittent load (see MR 2.30B.2(a)), except those to which Section 10.6 applies;
d) all registered facilities subject to an Ancillary Services Contract, and
e) any other equipment that System Management determines must be subject to outage scheduling to maintain Power System security and Power System reliability.

3. System Management will compile the list of equipment covered by this procedure and maintain it in its SMITTS database system.

4. System Management must provide the list described in subsection (3) and any updated list to the IMO. The IMO must publish any list provided by System Management.

4.2 Content of list

1. System Management will prepare and publish an initial list of equipment that will apply on the date this Outage Procedure comes into force. The list will include:

a) all network circuits that could limit output from a generating facility during a planned outage of that circuit;
b) all EGC generating units circuit breakers, switches and transformers operating at 330kV and 220kV;
c) all Non-EGC generating facilities with output ratings in excess of 10 MW; and
d) any contracted Ancillary Service not covered by the above.

4.3 List of equipment covered may be varied

1. System Management must review the list of equipment covered from time to time and may update the list.

2. When System Management considers a change is necessary, it must contact the Market Participant or Network Operator and outline the reasons.

3. 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
b. power system security and quality.

4. A Market Participant or Network Operator who wishes to have an item of equipment included or excluded from the list must contact System Management and set out the reasons for the request.

5. System Management must consider these reasons in light of the factors in subsection (3) above, and must endeavour to deal with the request promptly.

4.4 Market Participant or Network Operator can request IMO intervention

1. A Market Participant or Network Operator may request that IMO reassess the inclusion of the Facility or item of their equipment on the list in accordance with Market Rule 3.18.3.

2. System Management will consult with the IMO in the event an application to assess the inclusion of the Facility or item of equipment is made by a Market Participant or Network Operator.

4.5 Application of Procedures for part of year

1. The list described in section 4.1 of this procedure may specify that a piece of equipment on the list is subject to outage scheduling by System Management only at certain times of the year **[MR 3.18.2d]**.

2. Market Participants and Network Operators wishing to take up this option must lodge a request with System Management, and System Management must consider any such requests in light of the factors set out in section 4.3(3) of this procedure.

4.6 Application to Small Generators and Curtailable Loads

Generators and Curtailable Loads with a nameplate rating less than 10MW are not subject to the approval processes set out in this procedure. These faciilties are however obliged to provide certain information in relation to their availability status. These requirements are detailed in section 9.2 of this procedure.

5. OPERATOR COMMUNICATIONS AND CONTACTS

5.1 Participant Contacts

1. Market Participants and Network Operators must provide System Management with the name, position and communication details of the operating person(s) authorised to submit Outage Plans for each of their facilities.

2. Market Participants and Network Operators must also provide information on the name of the authorised person(s) who System Management must contact in the event of outage cancellations and outage recalls, noting that a recall could be requested outside business hours.

3. System Management must maintain a list of these contacts.

5.2 System Management Contacts

1. System Management must provide Market Participants and Network Operators with the names, position and communication details of the operating persons within System Management's organisation that Market Participants and Network Operators should communicate with in regard to the different parts of this procedure.

2. System Management must maintain the currency of this list, and make it available to Market Participants and Network Operators.

5.3 Disclosure of information

1. In performing its functions under the Market Rules in relation to outage scheduling, System Management may be required to disclose certain information to Market Participants and Network Operators. In selecting the information which may be disclosed, System Management will utilise best endeavours and act in

good faith to disclose only the information reasonably required by the application of the Market Rules.

6. COMMUNICATION AND PUBLICATION OF OUTAGE PLANS, SCHEDULES AND APPROVALS

System Management, Market Participants and Network Operators must communicate the outage notices and schedules relating to these procedures through System Management's SMMITS web interface.

7. OUTAGE SCHEDULE

1. System Management must maintain an outage schedule, containing information on all scheduled outages [**MR 3.18.4**]. 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.

2. System Management must update the outage schedule each month and provide the revised schedule to the IMO prior to 10.00 AM on the first business day of each month for publishing on the IMO's WEMS system.

3. System Management may produce at more frequent intervals that portion of the outage schedule that lists the outages programmed to take place in the final month.

8. CONTENT OF OUTAGE PLANS

1. A proposal submitted to System Management by a Market Participant or Network Operator in which permission is sought from System Management for the scheduling of the removal from service (or derating) of an item of equipment is a proposed outage plan ("**Outage Plan**") [**MR 3.18.4A**].

2. Market Participants and Network Operators must submit an Outage Plan to System Management whenever an outage is planned on an item of equipment covered by this procedure. Where a reference is made to an outage or item of equipment in this procedure, this includes partial or complete outages and de-rating of the facility or item of equipment [**MR 3.18.1**].

3. The procedures for lodging a request for an outage differ slightly depending on the type and duration of outage sought. The different classifications are specified in section 9 of this procedure and cover:

    a) Market Participants and Network Operators submitting outage plans for facilities holding capacity credits and seeking an outage in excess of one week (section 9.1);

    b) Market Participants and Network Operators submitting outage plans for all other planned outages (section 9.2); and

    c) Market Participants and Network Operators submitting requests for Opportunistic Maintenance (section 9.5).

8.1 Content of outage plan

1. Market Participants and Network Operators must submit all outage plans and requests for Opportunistic Maintenance through the SMMITS system and include the information specified in Appendix I.

2. System Management may require the Participant to clarify and expand some of the data in the outage plan, and may contact the latter for additional information.

8.2 Timing of submission and acknowledgment

1. The time of lodgement of the Outage Plan will be the time logged on SMMITS when the outage plan is transmitted to System Management.

2. System Management must acknowledge receipt of the Outage Plan through SMMITS. This acknowledgment must be sent before the end of the first business day following receipt of the notice and the timing of the acknowledgment will similarly be logged by SMMITS.

3. If a Market Participant or Network Operator has not received this acknowledgment, they must contact System Management at the earliest practical moment.

8.3 Changes to an Outage Plan

1. Outage plans submitted by a Market Participant or Network Operator must represent the good faith intention of the Market Participant or Network Operator to remove from service, or de-rate, the relevant Facility or item of equipment, for maintenance **[MR 3.18.7]**.

2. Where a Market Participant or Network Operator no longer plans to remove from service an item of equipment for maintenance purposes or to de-rate the Facility, it must inform System Management as soon as practicable **[MR 3.18.8]**. System Management should be informed by telephone and confirmed through the SMMITS interface system.

3. If the Market Participant or Network Operator wishes to modify the information in an outage plan it must contact System Management as soon as practical. If, in the view of System Management, these changes are minor, 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.

8.4 Limitations on changing outage times of Outage Plan

Where a Market Participant or Network Operator intends to remove from service, or de-rate, the relevant Facility or item of equipment for maintenance at a different time than indicated in an Outage Plan, it must submit a revised Outage Plan to System Management as soon as practicable [**MR 3.18.9**].

9. CLASSIFICATION OF OUTAGE PLANS AND REQUESTS

1. System Management must use an assessment and prioritisation process when evaluating Outage Plans. Market Participants and Network Operators seeking

outages for their equipment should endeavour to lodge their Outage Plans as early as possible as, all other things being equal, an earlier lodged Outage Plan will have priority over later lodged plans.

2. Outage Plans need to be submitted within specific time frames depending on the type of equipment seeking the outage and the duration of the outage.

9.1 Outage Plans for Market Participant facilities

This section relates to Market Participants with facilities holding capacity credits.

9.1.1 Outage Plans over one year ahead

Market Participants must, subject to section 9.1.2 of this procedure, submit to System Management details of a proposed Outage Plan at least one year but not more than three years in advance of the proposed outage, where [**MR 3.18.5**]:

a. the outage relates to a facility or item of equipment in respect of which a Market Participant holds capacity credits at any time during the proposed outage;
b. the facility or item of equipment has a nameplate capacity greater than 10 MW; and
c. the proposed outage has a duration of more than one week.

9.1.2 Outage Plans less than one year ahead and shorter duration outages

1. Market Participants may submit an Outage Plan to which section 9.1.1 of this procedure relates to System Management less than one year but not less than two days in advance of the proposed outage.

2. Market Participants may submit an Outage Plan less than one year but not less than two days in advance of the outage, for outages less than 7 days duration. In both these instances:

a. System Management must give priority to Outage Plans to which section 9.1.1 of this procedure relates and which were received more than one year in advance of the commencement of the proposed outage;
b. System Management must give priority to Outage Plans to which this section 9.1.2 of this procedure relates in the order they are received; and
c. System Management must give no special priority to Outage Plans to which this section relates relative to Outage Plans submitted pursuant to section 9.1.1 of this procedure.

9.1.3 IMO to provide System Management with list of equipment holding Capacity Credits

The IMO will provide System Management with a list of all facilities and equipment that hold capacity credits.

9.2 Outage Plans from Small Generators and Demand Management Facilities

1. Generators and Curtailable Loads with a nameplate rating less than 10MW and holding capacity credits are not subject to the same outage approval process as Generators and Demand Management facilities greater than 10MW.

2. Market Participants with generators and demand management facilities less than 10MW must notify System Management of their intention to take the facility out of service for planned maintenance. The notification will be through the lodgement of an outage plan (Appendix 1) submitted at least two business days prior to the outage commencing.

3. When submitting an outage plan covered by this section of the procedures, the plan should refer to the application of this section 9.2.

4. System Management must treat an outage plan received for a facility of this class as a Planned outage for which approval has been given.

5. System Management may not revoke or interfere with a Planned Outage of a Facility covered by section 9.2 of this procedure except in an Emergency Operating State.

6. The facilities covered by section 9.2 of this procedure will be subject to the forced outages provisions in the Market Rules, and Market Participants must notify System Management of any forced outage of a facility covered by this section 9.2, in accordance with section 14 of these procedures.

9.3 Outage Plans for Network facilities

Network Operators must submit an outage plan to System Management not more than three years and not less than 2 days in advance of a proposed outage of a network facility or item of equipment covered by this procedure.

9.4 Outage Plans lodged within the final six weeks

1. System Management may reject an Outage Plan first submitted within 6 weeks of the commencement time of the outage without evaluating that Outage Plan if, in the opinion of System Management, the submitting party has not allowed adequate time for the Outage Plan to be assessed [MR3.18.7A].

2. System Management must take into account the following factors contributing to the late submission:

    a) the Market Participant or Network Operator has just become aware of a need to carry out relatively urgent and unforeseen maintenance on its facility; and

    b) 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.

3. Participant should provide the information referred to in Section 9.4(2) where it wishes System Management to consider an outage plan submitted in the final six weeks.

4. When System Management is unable to assess an Outage Plan in the time available, System Management will require the Market Participant or Network Operator to resubmit the Outage Plan.

9.5 Grouping of Associated Outage Plans

1. Where a Network outage is likely to unduly impact the operation of one or more Market Participant facilities, System Management may require that in developing their Outage Plans, the relevant Network Operator and affected Market Participants coordinate the timing of their outages so as to minimise the impact of the Network outage on the operation of the Market facilities.

2. System Management must contact the Network Operator and/or the Market Generator where it is clear that there is a strong interdependency between Outage Plans for these facilities, and enquire whether there is an intention to lodge Outage Plans concurrently.

3. The Network Operator and Market Generator must endeavour to submit their outage plans together where System Management has indicated that a close association and inter-dependency exists.

4. In the situation where a close interdependency exists, System Management must assess these together and may approve, review or reject the group as a whole.

9.6 Request for Opportunistic Maintenance outage

Opportunistic Maintenance provides Market Participants and Network Operators with the opportunity to apply for short duration outages with less than 2 days notice to System Management. Outage Plans would be expected to be of short duration with short recall times.

9.6.1 Opportunistic Maintenance requested the day prior to the outage.

1. Market Participants and Network Operators may request that System Management approve an outage of a facility or item of equipment that is not a scheduled outage (Opportunistic Maintenance) to be carried out during a trading day at any time between 6.00 AM and 10.00 AM on the scheduling day for that trading day [refer to **MR 3.19.2**].

2. The request must relate to the following trading day only and must include all the information set out in Appendix I, and must specify the trading day intervals during which the Opportunistic Maintenance will occur.

9.6.2 Opportunistic Maintenance outage requested on the day of the outage

1. Market Participants and Network Operators may submit a request for Opportunistic Maintenance at any time on the trading day not later than 1 hour prior to the commencement of the trading interval during which the requested outage is due to commence, where:

    a. the outage must be to allow minor maintenance work on the facility to be performed, and

    b. the outage must not require any changes to scheduled energy or ancillary service quantities at the Facility, and

c. the outage must not exceed 4 hours duration and must end before the end of the trading day.

2. The request must include all of the information specified in Appendix 1 including the trading intervals over which the Opportunistic Maintenance will take place.

3. Approval must be subject to System Management being able to complete an assessment of the request in the time required.

10. ACCEPTANCE OF OUTAGE PLANS

10.1 Assessment of Outage Plans

1. System Management must undertake an assessment of an Outage Plan received from Market Participant or Network Operator within 10 business days of receipt of the plan.

2. If a large number of Outage Plans have been submitted, or the situation is such that System Management is unlikely to meet the 10 business day target, System Management must inform the Participant of this as soon as practical.

3. If the delay is due to conflicts between plans, System Management must manage this in accordance with section 10.6 of this procedure.

4. System Management must take all reasonable steps to expedite assessments of all submitted Outage Plans.

5. In carrying out these assessments, System Management must not show bias towards a Market Generator, Market Customer or Network Operator, in regard to its Outage Plans [**MR 3.18.12**].

10.2 Adequacy criteria for testing acceptability of Outage Plans

1. System Management must apply the following criteria when evaluating Outage Plans [**MR 3.18.11**]:

    a) the capacity of the total generation and curtailable load facilities remaining in service must be greater than the second deviation load forecast published in Medium Term or Short Term PASA study;

    b) the capacity of the total generation and curtailable load facilities remaining in service must satisfy the Ready Reserve Standard described in section 10.10 of this procedure;

    c) the transmission capacity remaining in service must be capable of allowing the dispatch of the capacity referred to in (a) above;

    d) the facilities remaining in service must be capable of meeting the applicable Ancillary Service Requirements;

    e) the facilities remaining in service must allow System Management to operate the power system within the applicable Technical Envelope; and

    f) notwithstanding the criteria set out in paragraphs (a) to (e), System Management may allow an outage to proceed if it considers that

preventing the outage would pose a greater threat to Power System Security or Power System Reliability over the long term than allowing the outage to take place.

3 System Management will undertake this assessment by examining one or more representative trading periods in the period covered by the Outage Plan(s).

4 Following an evaluation of a new outage plan, or an outage plan or group of outage plans that System Management has previously accepted fully or subject to conditions, System Management may find that an Outage Plan, or group of Outage Plans, when considered together, are acceptable, unacceptable or are acceptable under certain circumstances.

5 If System Management finds that a group of Outage Plans when considered together are acceptable, unacceptable or acceptable under certain circumstances, then all the Outage Plans in that group have that status.

10.3 Outage Plans that are accepted

Where System Management finds that an Outage Plan is acceptable and meets the power system adequacy test in section 10.2.1 of this procedure, it must schedule the Outage Plan in System Management's outage schedule accordingly and inform the Market Participant or Network Operator that submitted the Outage Plan [**MR 3.18.13**].

10.4 Outage Plans that need revision before acceptance

1. Where System Management finds that an Outage Plan is acceptable under certain circumstances, then it must inform the Market Participant or Network Operator that submitted the Outage Plan of its finding and the circumstances under which the Outage Plan would be acceptable [**MR 3.18.13**].

2. System Management must:

    a) consult with the Market Participant or Network Operator about those circumstances, and

    b) determine a date by which it expects to have sufficient information on those circumstances to reassess the Outage Plan, and

    c) inform the Market Participant or Network Operator of the date, and

    d) reassess the Outage Plan using the criteria in section 10.2.1. of this procedure following the date specified in accordance with (b) above.

3. If the Market Participant or Network Operator resubmits its Outage Plan to include the circumstances that make it acceptable, then System Management must accept the Outage Plan.

4. If System Management and the Market Participant or Network Operator cannot agree to the changes, or the changes are considered by System Management to be too extensive, System Management must undertake the process in section 10.6 of this procedure.

10.5 Outage Plans that are not acceptable

1. Where System Management finds that there is no circumstance in which the Outage Plan can satisfy the criteria prescribed in section 10.2.1 of this procedure and is therefore unacceptable, System Management must inform the Market Participant or Network Operator and request them to submit another Outage Plan.

2. Where the Outage Plan is in conflict with another Outage Plan(s) awaiting assessment or with an Outage Plan(s) in the outage schedule, and their combined effect makes them unacceptable, then System Management must inform all Market Participants and Network Operators affected and must negotiate with the affected Participants to attempt to reach agreement as to System Management's outage schedule [**MR 3.18.13d**],and:

    a) if agreement is reached, then the affected Market Participants and Network Operators must resubmit Outage Plans to System Management; or

    b) if no agreement is reached within 15 Business Days, then System Management must:

        i) decide which of the Outage Plans are acceptable and schedule these outages plans into System Management's outage schedule where they are not already scheduled;

        ii) decide which of the Outage Plans are unacceptable and remove these outages plans from the System Management's outage schedule where they were previously scheduled; and

        iii) notify each affected Market Participant whether its Outage Plan has been scheduled.

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

1. Where there are two or more Outage Plans or grouping of Outage Plans seeking to gain outages in identical trading periods, and the combined outages do not meet the power system adequacy criteria in section 10.2.1 of this procedure, System Management must use the following criteria when making a decision referred to in section 10.4.4 of this procedure in descending order of priority [**MR 3.18.14**]:

    a) System Management must give priority to the adequacy criteria in section 10.2.1 of this procedure;

    b) System Management must give priority to Outage Plans that have previously been scheduled in System Management's outage schedule, in the order in which they were entered into the schedule. An Outage Plan that has been entered into the outage schedule and has subsequently been revised is considered to have been entered into the schedule on the date the most recent revision of the Outage Plan was submitted;

    c) System Management must have regard to the technical reasons for the requested maintenance, the technical implications for the relevant equipment

if the maintenance is not carried out and a reasonable duration for maintenance carried out for those reasons; and

d) System Management must give priority to Outage Plans that would be more difficult to reschedule, including considering the amount of capacity that would be taken out of service and the duration of the outage.

2. System Management must notify all affected Market Participants and Network Operators of any decision made under this section of the procedure, and must document the reasons for this decision.

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

1. Section 10.2.1(f) of this procedure provides for System Management to permit an Outage Plan to proceed even though it does not meet the criteria set out in sections 10.2.1(a) to (e) of this procedure.

2. These situations are where the advantages to ongoing power system security are considered to exceed the reduced security risk that extends over the period of the outage. The factors that might be salient to a decision by System Management to permit the outage to proceed are where the requested outage is for work that:

   a) removes an existing risk to public safety or power system security or

   b) improves the ongoing security of the power system, such as could occur through installation of new or upgraded equipment.

3. System Management must document the reasons for accepting the Outage Plan, including System Management's estimation of the extent of the risk and the consequences of declining the Outage Plan and the ongoing advantages that arise over the longer term.

10.8 Reassessment by IMO of System Management's decision

1. Market Participants and Network Operators may apply to the IMO to reassess a decision by System Management to not schedule an outage plan or remove an Outage Plan from the schedule.

2. The process for Market Participants and Network Operators to lodge a request for reassessment and for the IMO to undertake this reassessment is set out in Market Rule 3.18.15.

3. Until the IMO completes its reassessment, System Management's decision continues to have effect and System Management and the Market Participant or Network Operator must continue to plan their operations on this basis.

4. Where System Management informs a Market Participant or Network Operator that an Outage Plan is unacceptable, and the IMO does not give System Management a direction under Market Rule 3.18.15, then System Management and the Market Participant or Network Operator must use their best endeavours to agree an alternative time for the relevant outage, and System Management must schedule the alternative time into its outage schedule [**MR 3.18.16**].

10.9 Notice of Intended Work for power system SCADA, protection and communication equipment

1. A notice of intended work (NOIW) is the application that Market Participants and Network Operators must submit when wishing to carry out work on a control and/or protection system, which does not require an outage or de-rating of the Facility itself, but the removal from service of the control or protection equipment can impact power system security.

2. The categories of equipment covered by this includes::

    a) Generation and transmission protection systems;

    b) Communication equipment associated with the operation of the power system; and

    c) Substation or generation RTU equipment where the latter is linked to System Management's central SCADA system.

3. The application must be submitted using the same format and process as set out for Outage Plans, except that the NOIW can be lodged up to 10.00 am of the day prior to the work commencing.

4. System Management must assess the NOIW and approve or reject it depending on its potential impact on power system security.

5. While this procedure provides an opportunity for Market Participants and Network Operators to gain approval to carry out work at short notice, nevertheless reasonable effort should be made to schedule this work at the same time as work on the primary facility is scheduled.

10.10 Ready Reserve Standard and Criteria

1. System Management must apply the Ready Reserve Standard when assessing whether an Outage Plan should be accepted or approved [**MR 3.18.11A**].

2. The Ready Reserve Standard requires that the available generation, Curtailable Load and Ancillary Services during the outage satisfies the following:

    a. sufficient additional energy can be made available within fifteen minutes to cover:

        i. 30% of the total output, including the effect of parasitic/unit load, of the generation unit synchronized to the SWIS with the highest total output at that time, plus;
        ii. the Minimum Frequency Keeping Capacity as required by the Frequency Keeping Standard;

    b. sufficient the additional energy can be made available within four hours to cover:

        i. 70% of the total output, including parasitic/unit load, of the generation unit synchronized to the SWIS with the second highest total output at that time, less

ii. the Minimum Frequency Keeping Capacity as required by the Frequency Keeping Standard; and

c. System Management may relax the requirements in a and b above in the following circumstances:

i. System Management expects that the SWIS load will be such that it exceeds the second standard deviation peak load forecast level used in the most recently published Short Term PASA for that Trading Interval; or
ii. during the four hours following an event that has caused System Management to call on additional energy maintained in accordance with clauses a) or b).

11. CHANGES TO POWER SYSTEM CONDITIONS AFFECTING SCHEDULED OUTAGES

1. The conditions forecast for the power system can change due to events beyond the power of Market Participants, Network Operators or System Management to predict.

2. System Management may become aware of these through information provided to System Management in the PASA process or other sources, or through more immediate events or situations arising that have altered the power system technical envelope.

3. Where a change in expected power system conditions occurs for a future time period after System Management has accepted an Outage Plan for an outage during that time period, such that the Outage Plan would no longer be acceptable were the criteria in section 10.2 of this procedure to be applied, System Management may withdraw its acceptance of the Outage Plan and deem that that the Outage Plan is unacceptable.

4. Where System Management makes such a decision, it must inform the relevant Market Participant or Network Operator of its decision immediately and take the actions required by section 10.5 of this procedure..

12. APPROVAL OF OUTAGES

System Management must undertake an assessment of the risk of proceeding with outages and opportunistic maintenance requests prior to any outage receiving approval.

1. Approval of Scheduled Outages No later than two days prior to the date of commencement of any outage (Scheduled Outage) in System Management's outage schedule, the Market Participant or Network Operator involved must request that System Management approve the scheduled outage proceeding, specifying the Trading Day and Trading Intervals during the scheduled outage will occur [**MR 3.19.1**]. Market Participants and Network Operators must also advise System Management of any change to the information in the Outage Plan.

2. The request for approval of the scheduled outage must be received by System Management no later than 10.00 AM of the day that the request for approval is due.

3. System Management must either approve or reject the scheduled outage and inform the Market Participant and Network Operator of its decision before 10.00 AM of the following day, ie by 10.00 AM of the day immediately prior to the day the outage commences.

4. If the request for approval is received after the time it is required to be received by System Management, System Management must reject the planned outage.

5. System Management must assess the request for approval of a Scheduled Outage based on the information available to System Management at the time of the assessment, and applying the criteria set out in section 13.3 of this procedure [**MR 3.19.3**].

12.1 Requirements relating to approval of Opportunistic Maintenance requests

1. Where the Market Participant or Network Operator has requested an Opportunistic Maintenance outage, System Management must either approve or reject the request and inform the Market Participant or Network Operator of its decision as soon as practicable.

2. System Management must assess the request for approval for Opportunistic Maintenance based on the information available to System Management at the time of the assessment, and applying the criteria set out in section 12.2 of this procedure [**MR 3.19.3**].

3. Where the request has been submitted the day prior to the outage under section 9.6.1 of this procedure, System Management must inform the Market Participant or Network Operator no later than 12.00 PM (noon) of the day preceding the start of the outage. System Management must contact the Market Participant and Network Operator by telephone with its decision, and then provide confirmation through the SMMITS interface system.

4. Where the request has been submitted in accordance with section 9.6.2 of this procedure on the day that the Opportunistic Maintenance is proposed, System Management must inform the Market Participant or Network Operator of its decision as soon as System Management is able to undertake the necessary assessment. System Management must contact the Participant by telephone with its decision, and then provide confirmation through the SMMITS interface system

5. In assessing whether to grant a request for Opportunistic Maintenance [**MR 3.19.3A**], System Management:

    a) must not grant permission for Opportunistic Maintenance to begin prior to the first trading interval for which Opportunistic Maintenance is requested;

    b) must not approve Opportunistic Maintenance for a facility or item of equipment on two consecutive trading days;

    c) may decline to approve Opportunistic Maintenance for a Facility or item of equipment where it considers that the request has been made principally

to avoid exposure to Reserve Capacity refunds rather than to perform opportunistic maintenance; and

d) may decline to approve a request for Opportunistic Maintenance for a Facility or item of equipment where it considers that inadequate time is available before the proposed commencement time to adequately assess the impact of the outage.

12.2 Criteria for final approval of Scheduled Outages or for approval of Opportunistic Maintenance

1. System Management must use the following criteria when considering approval of Scheduled Outages or requests for Opportunistic Maintenance: [**MR 3.19.6**]:

    a) the capacity of the generation and Curtailable Load remaining in service must be greater than the load forecast for the relevant time period, after allowing for the possible unavailability of the largest single generating unit expected to be operating;

    b) the facilities remaining in service must be capable of meeting the Ancillary Service Requirements;

    c) the facilities remaining in service must allow System Management to operate the power system within the Technical Envelope, which includes ensuring the power system maintains the level of redundancy set out in the SWIS security criteria; and

    d) where a group of outages when considered together, do not meet the criteria set out in paragraphs (a) to (c) above, then System Management should give priority:

        i) to outages scheduled in System Management's outage schedule more than one month ahead, then

        ii) to previously scheduled outages that have been deferred but were originally scheduled in System Management's outage schedule more than one month ahead, then

        iii) to outages scheduled in System Management's outage schedule less than one month ahead, then

        iv) to previously Scheduled Outages that have been deferred but were originally scheduled in System Management's Outage Schedule less than one month ahead, then

        v) to Opportunistic Maintenance.

3. Notwithstanding the criteria set out in paragraphs (1) to (iv) above, System Management may allow a Scheduled Outage to proceed if it considers that rejecting it would pose a greater threat to Power System Security or Power System Reliability than accepting it.

12.3 Where a scheduled outage is rejected

1. Where a scheduled outage does not meet the criteria in section 12.2 of this procedure it will be rejected.

2. Where System Management informs a Market Participant or Network Operator that an outage is rejected, then System Management and the Market Participant or Network Operator must use their best endeavours to find an alternative time for the relevant outage [**MR 3.19.7**].

3. Where it is possible with the agreement of the Market Participant and Network Operator to reschedule this outage in a manner that does not conflict with other approved outages, System Management will do so.

4. Where System Management considers that possible conflicts with other approved outages or Outage Plans may exist, then the System Management must reassess the outage along with other scheduled outages and Outage Plans using the criteria in section 12.2 of this procedure.

12.4 Compliance with System Management's decision to reject

1. Market Participants and Network Operators must comply with System Management's decision to reject an outage, and the relevant Market Participant or Network Operator must ensure that the outage is not taken, except that compliance is not required if such compliance would endanger the safety of any person, damage equipment, or violate any applicable law [**MR 3.19.8**].

12.5 An approved Outage Plan is a Planned Outage

1. An outage, including Opportunistic Maintenance, that is approved by System Management under these procedures is a Planned Outage [**MR 3.19.11**].

13. OUTAGE CANCELLATIONS AND OUTAGE RECALLS

System Management may cancel an approved outage, or where an outage is in progress, request equipment associated with that outage to be put back into service, in certain situations.

13.1 Emergency and High risk Operating States

1. Where the SWIS is in an Emergency Operating State, or High-Risk Operating State, System Management may direct a Market Participant or Network Operator that a Facility or item of equipment be returned to service from a Planned Outage in accordance with the relevant outage contingency plan, or take other measures contained in the relevant outage contingency plan [**MR 3.20.1**].

13.2 Change in power system conditions

1. Where a change in power system conditions after System Management has approved a Scheduled Outage or Opportunistic Maintenance means that the approved Scheduled Outage or Opportunistic Maintenance is no longer acceptable applying the criteria in section 12.2 of this procedure, System Management may cancel the approved Scheduled Outage or Opportunistic Maintenance.

2. Where System Management makes such a decision, it must inform the relevant Market Participant or Network Operator of its decision immediately [**MR 3.19.5**].

13.3 Market Participants and Network Operator to comply

1. Market Participants and Network Operators must comply with directions from System Management issued under the above directive [**MR 3.20.2**].

2. Market Participants and Network Operators are not required to comply with the direction if such compliance would endanger the safety of any person, damage equipment, or violate any applicable law.

3. Where a Participant cannot comply with such a direction it must inform System Management as soon as practicable [**MR 3.20.3**].

13.4 System Management to consider all options

1. Where a situation arises where the power system security is at risk and the situation could potentially be alleviated by the cancelling of outages, System Management must consider all current planned Outages and outages in progress and assess whether cancelling one or more Planned Outages or recalling equipment will assist the situation.

2. If in the view of System Management there is benefit in this action, it must contact the Market Participant or Network Operator and discuss the impact of cancelling the outage and returning the equipment to service:

3. 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.

4. With the information provided, System Management must consider the advantages of cancelling approved outages and/or returning equipment to service. If, in the view of System Management, this would help to reduce the seriousness of the situation, System Management may cancel one or more approved outages and direct the Market Participant or Network Operator to return the equipment to service within the specified recall time.

5. Market Participants and Network Operators must comply with the direction of System Management.

13.5 Changes to timing of an approved plan

1. Where the timing of the outage work associated with an approved outage, (ie a planned outage) is likely to be different from that stipulated in the approved plan, the Market Participant or Network Operator must contact System Management as soon as practical.

2. Providing there is no conflict with other planned outages or with power system security, System Management must accept the change.

3. Where the new times are in conflict with other approved outages, the outage will need to be rescheduled using the process set out in section 12.3 of this procedure.

13.6 Recommencement of cancelled or recalled outage

Where System Management has cancelled a planned outage or recalled an item of equipment that is undergoing an approved outage, System Management will agree with the Market Participant or Network Manager the time the planned outage should recommence. The recommencement of the planned outage should take precedence over any outage plan that has not been approved.

14. FORCED OUTAGES AND CONSEQUENTIAL OUTAGES

If a Generator or Curtailable Load suffers a forced outage or consequential outage, then the relevant Market Participant or Network Operator must inform System Management of the outage as soon as practical [**MR 3.21.4**].

The main details of the event should be communicated verbally to System Management as soon as practical.

The Market Participant or Network Operator should then provide a fuller description of the outage by sending to System Management, by 9.00 AM of the first business day after the outage has occurred, the information set out in Appendix II of this procedure.

The information should be communicated using the facility in System Management's SMMITS system provided for this purpose.

14.1 Forced Outage

1. A forced outage is any outage of a Facility or item of equipment covered by this procedure that has not received System Management's approval, including [**MR 3.21.1**]:

    a) outages or de-ratings for which no approval was received from System Management, excluding Consequential Outages;

    b) any part of an Outage that exceeds its approved duration; and

    c) where the Market Participant or Network Operator does not follow a direction from System Management to return the equipment to service within the time specified in the appropriate contingency plan.

14.2 Consequential Outages

1. A consequential outage is an outage of a Facility or item of equipment covered by this procedure for which no approval was received by System Management [**MR 3.21.2**], but which System Management determines:

    a) was caused by a Forced Outage to another Rule Participant's equipment; and

b) would not have occurred if the other Rule Participant's equipment did not suffer a Forced Outage.

14.3 Forced outage and consequential outage information for IMO

1. System Management must record the information provided by a Market Participant or Network Operator relating to each forced outage and consequential outage as provided under sections 14.1 and 14.2 of this procedure.

2. System Management will communicate this information and any additional information relevant to the event to the IMO using the IMO's WEMS system by noon of the first business day after the event has occurred.

15. SWITCHING PROGRAMMES

A switching programme must be agreed between System Management and the Network Operator or Market Generator as part of the technical rules and requirements covering access to the Network and safety of equipment and personal.

The switching programme will cover the switching, isolation, earthing and "permit to work" phases necessary to make the equipment safe to work, from commencement of the outage through to return of equipment to service at the completion of the outage.

The switching programme must be agreed prior to 12.00 hours of the day preceding the start of the outage.

16. SYSTEM MANAGEMENT TO MAINTAIN AND PROVIDE INFORMATION

16.1 System Management to maintain record of all planned and unplanned outages

1. System Management must keep a record of the following:

    a. each Planned Outage it receives;
    b. each scheduled outage it accepts;
    c. each Planned Outage it approves;
    d. each forced outage of which it is informed; and
    e. each consequential outage of which it is informed.

2. The information must be stored and maintained on System Management's SMMITS system for later access by System Management.

16.2 System Management to maintain record of decisions

1. System Management must keep records of all of its outage evaluations and decisions made in accordance with this procedure together with the reasons for each outage evaluation and decision, and must submit these records to the IMO in the event of a review and not less than once every three months [**MR 3.18.17/ 3.19.13**].

2. System Management must store and maintain these records on System Management's SMMITS system.

APPENDIX I CONTENT OF OUTAGE PLAN

A.	Identity of the Facility or item of equipment that will be Unavailable. (Description should use standard terms and station Identification)	**Outage Plan Reference No.**
B.	The quantity of any de-rating	
C.	Reason for Outage:	
D.	Proposed Start and End Time of Outage	
E.	An assessment of risks that might extend the outage, and the possible duration of any extension	
F.	Details of the time it would take the Facility or item of equipment to be returned to service if required	
G.	Contingency plan for the early return to service of the Facility or item of equipment	
H.	Other information relevant to request for outage approval.	

Authorised Representative submitting Outage Plan: ……..

Date of Submission:

Acknowledgment of Receipt by System Management: ……..

Date of Receipt: …….

Appendix II **Information to be provided by Market Participants and Network Operators to System Management in the event of a forced or consequential outage**

Category of outage	**Forced or consequential outage**
Owner of equipment or facility	
Identity of facility or item of equipment	
Extent of outage or derating	(eg total outage of capacity)
The time the outage commenced	Min/hour/day
The time the outage finished, or an estimate of the time the outage is expected to finish	Min/Hour/day
Cause of Outage 1) Internal fault, or 2) Consequent on failure of another Facility	
The expected available capacity by Trading Interval for each affected Registered Facility	
Any further information relevant to the Outage event	

Appendix III **Information to be provided by System Management to IMO in the event of a forced outage or consequential outage**

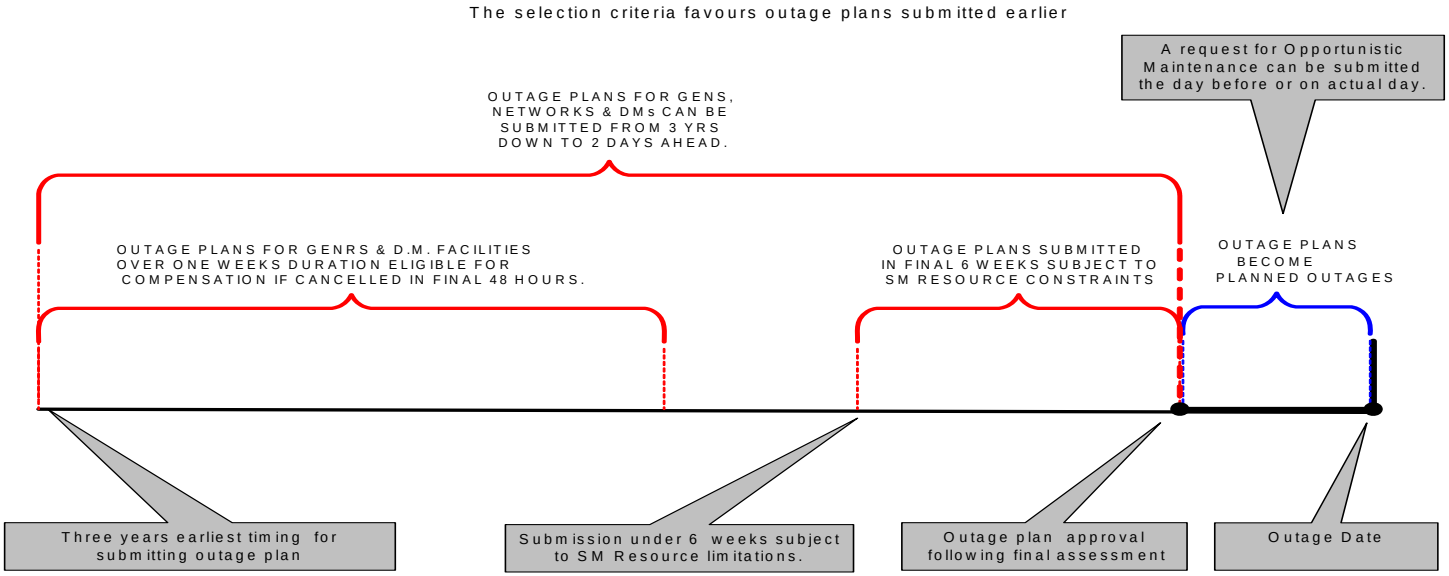
Category of outage	**Forced or consequential outage**
Owner of Equipment	
Identity of facility or item of equipment	
Extent of outage or de-rating	(eg total outage of capacity)
The time the outage commenced	Min/hour/day
The time the outage finished, or an estimate of the time the outage is expected to finish	Min/Hour/day
Cause of Outage 1) Internal fault, or 2) Consequent on failure of other Facility	
The expected available capacity by Trading Interval for each affected Registered Facility	
Any additional information received through SCADA	

APPENDIX IV INFORMATION MAINTAINED BY SYSTEM MANAGEMENT

Register of decisions made under the System Management Facility Outage Procedure

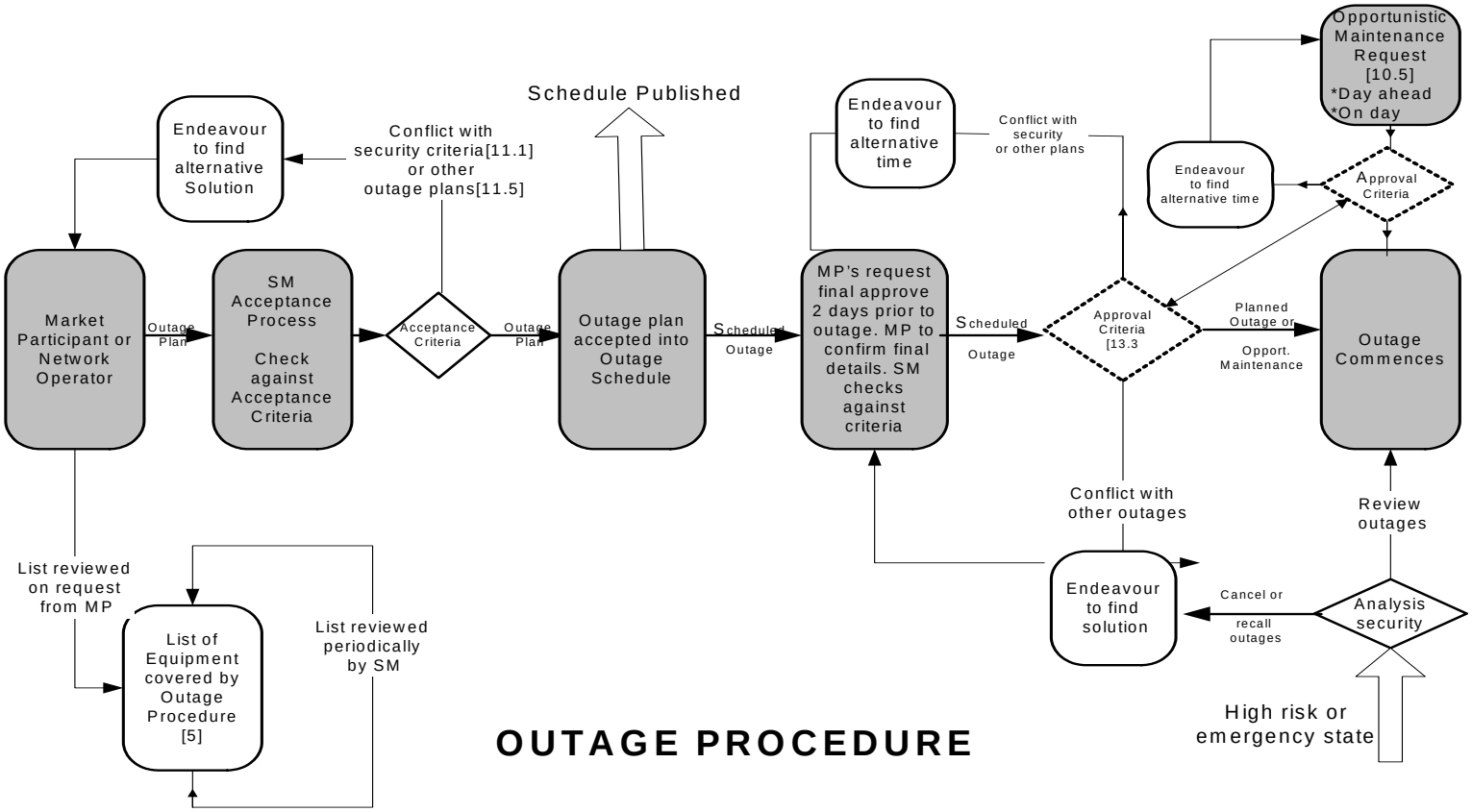
Identity of facility **or item of equipment**	
Nature of request (Request for acceptance or plan approval)	
Identity Number of Outage Plan (Identity of Outage Plan lodged on SMMITS)	
Type of decision made (to accept, reject or approve a request)	
Reference to part of procedure under which decision made	
Reason for decision (refer to criteria)	
Rationale for decision (if appropriate)	

APPENDIX V OUTAGE PLANNING TIMELINE



OUTAGE PLANNING TIMELINE

APPENDIX VI - OVERVIEW OF PROCEDURE



ELECTRICITY INDUSTRY ACT

ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

WHOLESALE ELECTRICITY MARKET RULES

Power System Operation Procedure:

Facility Outages

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.

TABLE OF CONTENTS

1. FACILITY OUTAGE PROCEDURE

The Power System Operation Procedure: Facility Outages Procedure ('Procedure') details procedures that System Management and Rule Participants must follow when planning for an outage of a network, generation, load or Ancillary Service Facility.

2. RELATIONSHIP WITH MARKET RULES

1. This Procedure has been developed in accordance with, and should be read in conjunction with clauses 3.18 to 3.21 of the Wholesale Electricity Market (WEM) and Rules (Market Rules).

2. References to particular Market Rules within the Procedure in bold and square brackets **[MR XX]** are current as at 7 October 2008. These references are included for convenience only, and are not part of this Procedure.

3. In performing its functions under the Market Rules, System Management may be required to disclose certain information to Market Participants and Network Operators. In selecting the information that may be disclosed, System Management will utilise best endeavours and act in good faith to disclose only the information reasonably required by the application of the Market Rules.

3. SCOPE

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.

4. ASSOCIATED PROCEDURES AND OPERATING STANDARDS

The following Power System Operation Procedures are associated with this Power System Outage Procedure.

a) Power System Operation Procedure – Communications and Control Systems
b) Power System Operation Procedure – Power System Security
c) Power System Operation Procedure – Commissioning and Testing

5. APPLICATION OF OUTAGE PROCEDURE TO FACILITIES

The requirements for Market Participant or Network Operator Facilities to be subject to the Facility Outage Procedure set out in this document are specified in the Market Rules **[MR 3.18.2(f)].**

5.1 System Management must compile and maintain a list of all equipment on the SWIS

1. The requirements for System Management to compile and maintain a list of all equipment in the SWIS that is required to be subject to outage scheduling by System Management are specified in the Market Rules **[MR 3.18.2(a)&(b)].**

2. System Management will compile and maintain the list of equipment covered by this Procedure.

3. System Management will provide the list for publication in accordance with the Market Rules **[MR 3.18.2(e)].**

5.2 Content of equipment list

1. Notwithstanding requirements of the Market Rules **[MR 3.18.2(c)]** the list of equipment may include:

    (a) all network circuits that could limit output from a generating facility during a planned outage of that circuit;
    (b) all EGC generating units;
    (c) all circuit breakers, switches and transformers operating at 330kV and 220kV;
    (d) all Non-EGC generating facilities with output ratings in excess of 10MW; and
    (e) any facilities contracted to provide Ancillary Services that are not covered by the above.

2. System Management may determine that generators and loads with a name plate capacity rating less than 10MW's 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].**

5.3 Application of Procedures for part of year

1. System Management may specify a piece of equipment to be part of the list at a particular time of the year in accordance with the Market Rules **[MR 3.18.2(d)].**

2. In determining whether a piece of equipment should be subject to outage scheduling at specified times of the year, System Management may utilise the equipment list as guidance in exercising its discretion.

5.4 List of equipment covered may be varied

1. A Market Participant or Network Operator who wishes to have an item of equipment included or excluded from the list must contact System Management and set out the reasons for the request.

2. 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

b. Power System Security and Power System Reliability.

3. A Market Participant or Network Operator may request that IMO reassess the inclusion of the Facility or item of their equipment on the list in accordance with the Market Rules **[MR 3.18.3].**

4. The IMO and System Management will review the inclusion of an item of equipment in accordance with the Market Rules **[MR 3.18.3].**

6. COMMUNICATIONS AND CONTACTS

6.1 Participant Contacts

1. Depending on the circumstances, System Management may communicate directly with participants or request participants to seek resolution amongst themselves.

2. 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.

3. System Management will maintain a record of details as advised above and make them available to the Market Participants and involved parties on an as needs basis.

6.2 System Management Contacts

1. System Management will from time to time advise Market Participants and Network Operators of its contact details and modes of communication, of persons who should be communicated with concerning outages.

7. 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 web interface or as directed by System Management from time to time. This system shall be referred to as 'SMMITS' within this Procedure.

8. OUTAGE SCHEDULE

1. 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**].

2. The Outage Schedule shall contain a list of all accepted and approved outages.

3. 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.

9. OUTAGE PLANS - GENERAL

1. The requirements for Market Participants to submit Outage Plans to System Management are specified in the Market Rules **[MR 3.18.4A].**

9.1 Information required for outage plans

1. Market Participants and Network Operators must submit all outage plans and requests for day-ahead Opportunistic Maintenance through SMMITS or as otherwise directed from time to time, and include the information specified in accordance with the Market Rules and this Procedure **[MR 3.18.6].**

2. System Management may require the Participant to clarify or provide additional information in the outage plan.

9.2 Timing of submission and acknowledgment

1. 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.

9.3 Changes to an Outage Plan

1. 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].**

2. A Market Participant or Network Operator must inform System Management by telephone and must provide confirmation through SMMITS.

3. 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.

9.4 Outage Plans lodged within the final six weeks

1. 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].**

2. System Management must take into account the following factors contributing to a submission made within 6 weeks of the commencement time:

    a. the Market Participant or Network Operator has just become aware of a need to carry out relatively urgent and unforeseen maintenance on its facility; and
    b. 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.

3. When System Management is unable to assess an Outage Plan in the time available, System Management will require the Market Participant or Network Operator to resubmit the Outage Plan.

9.5 Grouping of Associated Outage Plans

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

2. In the situation where a close interdependency exists between facilities, System Management must assess these together and may approve, review or reject the group as a whole.

9.6 Outages and Commissioning

Outages that require commissioning should conform to the requirements of the Market Rules and the Power System Operation Procedure: Commissioning and Testing.

10. ACCEPTANCE OF OUTAGE PLANS

10.1 Assessment of Outage Plans

1. A Market Participant or Network Operator must make application for the acceptance of an outage plan via SMMITS or as otherwise directed. For the purposes of this Procedure the Proposed Outage Plan is deemed a request for acceptance.

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.

3. System Management must take all reasonable steps to expedite assessments of all submitted Outage Plans.

10.2 Adequacy criteria for assessing the acceptability of Outage Plans

1. The criteria that System Management must apply when assessing the acceptability of Outage Plans are specified in the Power System Operating Procedure: Power System Security and the Market Rules **[MR 3.18.11** and **MR 3.18.12].**

2. System Management may undertake this assessment by examining one or more representative trading periods in the period covered by the Outage Plan(s).

10.3 Processing of Outage Plans after Evaluation

The requirements for processing a new Outage Plan, or an Outage Plan or group of Outage Plans that System Management has previously accepted unconditionally or subject to conditions, are specified in the Market Rules **[MR 3.18.13].**

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

1. 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].**

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

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

1. 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)].**

2. System Management will take account of situations where the advantages to ongoing Power System Security are considered to exceed the reduced security risk that extends over the period of the outage.

3. 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 of accepting an Outage Plan.

10.6 Reassessment by IMO of System Management's decision

The requirements for Market Participants and Network Operators to apply to the IMO to reassess a decision by System Management to not include or to remove an Outage Plan from the Outage Schedule are specified in the Market Rules **[MR 3.18.15].**

11. CHANGES TO POWER SYSTEM CONDITIONS AFFECTING SCHEDULED OUTAGES

1. SWIS conditions can change from the forecast .Where a change in expected power system conditions occurs for a future time period after System Management has accepted an Outage Plan for an outage during that time period, such that the Outage Plan would no longer be acceptable, System Management may withdraw its acceptance of the Outage Plan and deem that that the Outage Plan is unacceptable.

2. Where System Management makes such a decision, it must inform the relevant Market Participant or Network Operator of its decision via SMMITS or as otherwise directed, and where sufficient time exists, System Management will use reasonable endeavours to confirm its decision by telephone.

12. 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 for an

outage where this communication may be deemed as a request for Acceptance ('Pre-Accepted Outage').

2 Where requesting a Pre-Accepted Outage, a Market Participant must first telephone System Management and obtain a verbal agreement that there is a likelihood that the request can be approved.

3 Following the telephone call or as otherwise directed, the Market Participant must provide the Proposed Outage Plan via SMMITS.

4 System Management will apply the approval framework in accordance with clause 13 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 will be deemed as satisfying the request for Acceptance.

13 APPROVAL OF SCHEDULED OUTAGES

1. 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].**

2. A Market Participant or Network Operator must make application for approval for a Scheduled Outage Plan via SMMITS or as directed.

3. 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. 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].**

5. Before approving a Scheduled Outage request, System Management may at its sole discretion require a Market Participant or Network Operator to make a written declaration that the unit is available prior to the outage commencing. System Management will reject any Scheduled Outage request where the relevant Market Participant or Network Operator does not comply with such a request.

6. Notification by System Management of either an approval or rejection of a Scheduled Outage must be made via SMMITS or as otherwise directed, in accordance with the Market Rules **[MR 3.19.4].**

14 APPROVAL OF DAY-AHEAD OPPORTUNISTIC MAINTENANCE ('DAOM') REQUESTS

1. The requirements for a Market Participant or Network Operator to request approval of a day-ahead Opportunistic Maintenance Outage are specified in the Market Rules **[MR 3.19.2(a)].**

2. A Market Participant or Network Operator must make application for the approval of a day-ahead Opportunistic Maintenance outage request by

telephone and via SMMITS, or as otherwise directed. System Management will advise its contact details from time to time.

3. The criteria that System Management must adhere to when assessing whether to grant approval of a day-ahead Opportunistic Maintenance Outage requests are specified in the Market Rules **[MR 3.19.6].**

4. System Management will not approve a request for a day-ahead Opportunistic Maintanence request after 12pm on the Scheduling Day.

5. Before approving a day-ahead Opportunistic Maintenance request System Management may at its sole discretion require a Market Participant or Network Operator to make a written declaration that the unit is available prior to the outage commencing in accordance with the Market Rules **[MR 3.19.3A(c)].** System Management will reject any day-ahead Opportunistic Maintenance request where the relevant Market Participant or Network Operator does not comply with such a request.

6. System Management must provide confirmation of its approval or rejection via SMMITS or as otherwise directed, as soon as practicable. The relevant Market Participant or Network Operator may confirm via telephone the decision of System Management.

7. System Management must not approve a day-ahead Opportunistic Maintenance request which will require any change in scheduled energy or ancillary services. This means a Non-EGC generator cannot have a day-ahead Opportunistic Maintenance request approved that would result in the generator being unable to comply with its Resource Plan.

15 APPROVAL OF ON-THE-DAY OPPORTUNISTIC MAINTENANCE ('ODOM') REQUESTS

1. The requirements for a Market Participant or Network Operator to request approval of an on-the-day Opportunistic Maintenance Outage are specified in the Market Rules **[MR 3.19.2(b)].**

2. A Market Participant or Network Operator must make application for the approval of an on-the-day Opportunistic Maintenance outage request by telephone and via SMMITS, or as otherwise directed. System Management will advise its contact details from time to time.

3. The criteria that System Management must adhere to when assessing whether to grant approval of an on-the-day Opportunistic Maintenance Outage requests are specified in the Market Rules **[MR 3.19.6].**

4. Before approving an on-the-day Opportunistic Maintenance request System Management may at its sole discretion require a Market Participant or Network Operator to make a written declaration that the unit is available prior to the outage commencing in accordance with the Market Rules **[MR 3.19.3A(c)].** System Management will reject any on-the-day Opportunistic Maintenance request where the relevant Market Participant or Network Operator does not comply with such a request.

5. System Management will 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.

6. Subsequently System Management shall log an approval and note a written notation reflecting the outcome.

7. System Management must not approve an on-the-day Opportunistic Maintenance request which will require any change in scheduled energy or ancillary services. This means a Non-EGC generator cannot have an on-the-day Opportunistic Maintenance request approved that would result in the generator being unable to comply with its Resource Plan.

16. COMPLIANCE WITH SYSTEM MANAGEMENT'S DECISION

The requirements for Market Participants and Network Operators to comply with System Management's decision to reject an outage are specified in the Market Rules **[MR 3.19.8].**

17. OUTAGE RECALLS

1. 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 will assist the situation.

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.

3. 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.

4. Market Participants and Network Operators must comply with the direction of System Management.

18. SUBMISSION OF FORCED OUTAGES AND CONSEQUENTIAL OUTAGES

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

2. Where equipment is unavailable or de-rated, the relevant Market Participant or Network Operator experiencing the unavailability or de-rating should 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]**.

3. The relevant Market Participant or Network Operator must regularly inform System Management of the equipment's status and likely return to service time.

4. 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, 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].**

19 FORCED OUTAGE AND CONSEQUENTIAL OUTAGE INFORMATION FOR IMO

1. 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]**.

2. System Management will communicate this information and any additional information relevant to the event to the IMO in accordance with the timelines specified in the Market Rules **[MR 7.13.1A** and **MR 7.3.4].**

3. System Management will 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.

ELECTRICITY INDUSTRY ACT

ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

WHOLESALE ELECTRICITY MARKET RULES

Power System Operation Procedure: Ancillary Services

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.

Market Procedures Published by the Minister

I, FRANCIS LOGAN, Minister for Energy for the State of Western Australia, under regulation 9(2) of the Electricity Industry (Wholesale Electricity Market) Regulations 2004 hereby approve the publication of the Power System Operation: Ancillary Services Procedure contained in this document.

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.

… … … … … … … … … … … … … … … …

Dated at Perth this … … … day of … … … … …2006.

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1. RELATIONSHIP WITH MARKET RULES

The Market Rules specify that System Management must document in the Power System Operation Procedure the procedure to be followed, and must follow that documented Market Procedure, when [**MR 3.11.14**]:

a. determining Ancillary Service Requirements;
b. entering into Ancillary Service Contracts, including the process for conducting competitive tender processes for the awarding of such contracts; and
c. preparing budget proposals for providing Ancillary Services.

This procedure sets out the processes that must be followed each year by System Management, Participants and Ancillary Service Providers as part of the Ancillary Service procurement process, except that in the first year of operation of the market, a transitional arrangement for procurement of Ancillary Services will apply.

Appendix II of this procedure provides an overview of the procurement process and the timetable that will apply once the transitional arrangement expires.

This procedure is made in accordance with Market Rule 3.11.14.

2. ASSOCIATED PROCEDURES AND OPERATING STANDARDS

a. SWIS Technical Rules and Operating Standards (Technical Rules)
b. Power System Operation Procedure - Dispatch
c. Power System Operation Procedure – Power System Security

3. DESCRIPTION OF ANCILLARY SERVICES

The definition of each Ancillary Service covered by the Market Rules and this Procedure is set out below [**MR 3.9**].

Appendix I of this procedure provides a more detailed description of each service.

3.1 Load Following Service

Load Following Service is the service of frequently adjusting the output of one or more Scheduled Generators within a Trading Interval so as to match total system generation to total system load in real time in order to correct any SWIS frequency variations.

3.2 Spinning Reserve Service

1. Spinning Reserve Service is the service of holding capacity associated with a synchronised Scheduled Generator, Dispatchable Load or Interruptible Load in reserve so that the relevant Facility is able to respond appropriately in any of the following situations [**MR 3.9.2**]:

    a. to retard frequency drops following the failure of one or more Registered Facilities; or

b. to supply electricity if the alternative is to trigger involuntary load curtailment.

2. Spinning Reserve response is measured over three time periods following a contingency event. A provider of Spinning Reserve Service must be able to ensure the relevant Facility can:

    a. respond appropriately within 6 seconds and sustain or exceed the required response for at least 60 seconds; or
    b. respond appropriately within 60 seconds and sustain or exceed the required response for at least 6 minutes; or
    c. respond appropriately within 6 minutes and sustain or exceed the required response for at least 15 minutes,

for any individual contingency event.

3.3 Load Rejection Service

Load Rejection Reserve Service is the service of holding capacity associated with a Scheduled Generator or Dispatchable Load in reserve so that:

a. the Scheduled Generator can reduce output rapidly; or
b. the Dispatchable Load can increase consumption rapidly, in response to a sudden decrease in SWIS load giving rise to a significant over-frequency.

3.4 System Restart Service

System Restart Service is the ability of a generation system to start without requiring energy to be supplied from a Network to assist in the re-energisation of the SWIS in the event of system shutdown.

3.5 Dispatch Support Service

Dispatch Support Service is any other Ancillary Service that is needed to maintain Power System Security and Power System Reliability not covered by the other Ancillary Services. Dispatch Support Service is to include the service of controlling voltage levels in the SWIS, where that service is not already provided for under the Market Rules such as a Network Control Service Contract, or under a separate arrangement for Access.

4. ANNUAL DETERMINATION OF ANCILLARY SERVICE REQUIREMENTS

The Ancillary Service Requirements specify the quantity of each Ancillary Service needed to meet the Ancillary Service standards over a year. System Management must determine the Ancillary Service Requirements for the:

a. Load Following Service;
b. Spinning Reserve Service;
c. Load Rejection Reserve Service;
d. Dispatch Support Service; and
e. System Restart Service

The Ancillary Service Requirements must be determined and set out each year in a report System Management submits to the IMO. The report must specify the quantity of each Ancillary Service expected to be needed to meet the Ancillary Service Standards in the trading periods and situations anticipated. The report will cover the financial year commencing on 1 July and finishing on 30 June of the year following.

4.1 Information used in the determination of Ancillary Service Requirements

1. System Management must determine the Ancillary Service Requirements in order to meet the following standards and requirements:

    a. SWIS Operating Standards as contained in the Technical Rules; and
    b. Ancillary Service Standards as defined in Clause 3.10 of the Market Rules.

2. System Management must use the following information in its determination of Ancillary Service Requirements:

    a. Medium Term PASA studies;
    b. Equipment Limits and Security Limit information received by System Management from the IMO or Participants; and
    c. any other information that System Management considers relevant to the determination.

3. System Management may seek further information from Participants and Ancillary Service Providers in order to complete its determination of Ancillary Service Requirements where this information is relevant to the assessment.

4. Participants and Ancillary Service Providers will make every reasonable endeavour to provide this information to System Management in the form requested, and as soon as practical.

4.2 Ancillary Service Requirement timetable

1. A draft assessment of the Ancillary Service Requirements for the forthcoming financial year should be completed by 1 March prior to the beginning of that year.

2. System Management will consult with the IMO on the preparation of Ancillary Service Requirements to ensure that any issues the IMO may have with System Management's assessment of Ancillary Service quantities are addressed in the report.

3. The draft Ancillary Service Requirements will form part of System Management's budget analysis for Ancillary Service costs submitted to the IMO by 30 April. [**MR 2.23.9** and section 8 of this procedure].

4. System Management's final determination of Ancillary Services Requirements must be submitted to the IMO as part of the Ancillary Services Performance Report by 1 June. [**MR 3.11.11** and section 9 of this procedure].

4.3 Scope of Analysis of Ancillary Service Requirements

1. In its analysis of Ancillary Service Requirements, System Management must have regard to the conditions and situations applying during the year, including:

    a. the commissioning or decommissioning of new facilities;
    b. the performance of facilities that give rise to the need for additional Ancillary Services;
    c. the risk associated with non-availability or non-performance of Ancillary Service sources; and
    d. the variability and predictability of demand on the SWIS.

2. The assessment of quantities must recognize that Ancillary Service Requirements may [**MR 3.11.5**]:

    a. be location specific;
    b. vary for different SWIS load levels or other scenarios;
    c. vary by the type of day and time of day; and
    d. vary across the year.

3. System Management must set out in the Ancillary Service Requirements report submitted to the IMO the assumptions and circumstances that were relevant to System Management's determination of quantities.

4. The IMO must audit System Management's determination of the Ancillary Service Requirements, and may require System Management to re-determine these Requirements [**MR 3.11.6**].

5. The IMO audit should be a consultative process aimed at ensuring that an outcome suitable to the IMO and System Management is obtained as soon as practical after the Ancillary Service Requirements have been made available for audit.

4.4 Impact of Technical Rules on Ancillary Service Quantities

1. System Management must confirm whether any of the Ancillary Services needing to be procured under this procedure are included as a requirement in the Technical Rules for connection to the SWIS network. If there is such an obligation, System Management should assess the impact of this on Ancillary Service Requirements and whether this impacts on the quantity of Ancillary Services needed.

4.5 Changes to Ancillary Service Requirements

1. During the period over which the Ancillary Service Requirements apply, System Management must monitor the conditions giving rise to its determination.

2. Where System Management considers that a shortfall of an Ancillary Service relative to an Ancillary Service Standard has occurred or may occur, System Management should reassess the Ancillary Service Requirements for that Ancillary Service.

3. Where System Management considers the changes are significant and in System Management's view may give rise to adverse effects on power system quality and security, System Management must prepare a report to the IMO setting out the circumstances and making a recommendation.

4. System Management may recommend to the IMO one or more actions to improve the situation described in (3), examples of which are:

    a. contracting or arranging additional Ancillary Service;
    b. operating with reduced security levels; and
    c. restricting the actions of a Participant or Participant's Facility that might be giving rise to the increased need for Ancillary Services.

5. The IMO must consider and respond to System Managements proposal for corrective action as soon as practical. Any proposed amendment by IMO to System Management's recommendation must be agreed with System Management.

6. System Management must undertake the agreed course of action as soon as practical after it is approved by the IMO.

5. ANCILLARY SERVICE PROCUREMENT PROCESS

1. Each year System Management must undertake an Ancillary Service procurement process aimed at securing sufficient Ancillary Services to meet the levels determined in the Ancillary Services Requirements.

2. The Ancillary Services Procurement Plan (referred to as the Ancillary Services Plan in the Market Rules) must cover the same period (1 July to 31 June) as the Ancillary Service Requirements to which the Plan corresponds.

3. The procurement process will involve the following phases: (with the exception of year 1 when transitional arrangements apply):

    a. the issuing of an Expression of Interest;
    b. the calling of competitive tenders (if required);
    c. the assessment of tenders according to the criteria in the Market Rules;
    d. the development of proposals for meeting the Ancillary Service Requirements;
    e. the submission and approval of an Ancillary Services Procurement Plan setting out the procurement proposal; and
    f. the formalising of the necessary contracts and agreements.

5.1 Expression Of Interest

1. System Management must issue by 1 March each year a request for an Expression of Interest for the supply of Ancillary Services.

2. The request must be published on the IMO's website, and in any other form that System Management considers advisable.

3. System Management must provide the necessary consultation and assistance where requested by respondents to assess the capability of their facilities to meet the technical specification.

4. System Management must determine from the responses to the request for Expression of Interests whether there is sufficient interest to proceed with a

competitive tender. In making this determination, System Management must give due weight to:

a. the likelihood of the respondents meeting the technical requirements of the Ancillary Services;
b. the need to minimise the cost of procuring the necessary Ancillary Service Requirements and meet the commercial criteria which the tendered services will be subject to; and
c. whether sufficient Ancillary Services will be available from EGC and other contracted sources.

5. System Management must complete its evaluation of the responses to the Expression of Interest by 31 March, and inform the IMO of the results of its evaluations and whether System Management intends to proceed with a competitive tender process for particular Ancillary Services.

6. The IMO must publish System Management's conclusion on whether to proceed with a competitive tender process on the IMO's website as soon as practical. If a Participant who had lodged an Expression of Interest considers that System Management should have undertaken a competitive offer process contrary to the conclusion of System Management, it should contact IMO within 7 days with a request for a review of that decision.

7. IMO should review System Management's decision on whether to proceed, and either confirm System Management's finding or require System Management to proceed with a competitive tender process. This review should be completed within 7 days of the date when System Management has provided its conclusion to the IMO.

5.2 Competitive Tenders

1. If a decision is made to undertake a competitive tender process, System Management must issue a request for tenders at the earliest practical date.

2. The request for tenders for the supply of one or more Ancillary Services should be published on the IMO's website and in any other form that System Management considers desirable.

3. The request for tenders should be accompanied by:

a. a template contract covering the Ancillary Services for which tenders are sought;
b. a description of the tender assessment criteria; and
c. a statement that all contracts will be conditional on agreement to System Management's Ancillary Services Procurement Plan.

4. The tender and evaluation process should be completed in time for System Management to include its proposal for securing Ancillary Services for the coming financial year in the Ancillary Services Procurement Plan submitted to the IMO by 1 June.

5.3 Assessment criteria

1. System Management should consider the following factors and criteria when evaluating a tender for supply of an Ancillary Service. To be acceptable, the minimum requirements of a proposal are that it should:

    a. meet the technical requirements set out in the draft Ancillary Service Supply Contract; and
    b. the Ancillary Service Contract should provide a less expensive alternative to the Ancillary Services provided by EGC's Facilities, except that;
    c. if System Management does not consider that it can meet the Ancillary Service Requirements from just EGC's Facilities and the Ancillary Services already contracted, it may consider additional services that do not meet the condition in section 5.3(1)b.

2. The factors listed above are not exclusive, and System Management may take into account any other matter consistent with the objectives in clause 1.2.1 of the Market Rules.

3. System Management must document the results of its evaluations, including the reasons for accepting or rejecting each contract proposal.

5.4 Preparation and Approval of Ancillary Service Procurement Plan

1. System Management must prepare an Ancillary Service Procurement Plan setting out how it proposes to meet the Ancillary Service Requirements for the forthcoming financial year.

2. The Ancillary Service Procurement Plan must be submitted to the IMO by I June as part of the final Ancillary Service Report for the year [**MR 3.11.11**].

3. The Ancillary Services Procurement plan must set out for each Ancillary Service:

    a. the total quantity required of each Ancillary Service;
    b. the total quantity of Ancillary Services for which contracts are in place or contractual commitments have already been made;
    c. the net quantity of Ancillary Services needing to be procured from EGC and any other contract sources [(a) –(b)];
    d. the results of the "Expression of Interest" process undertaken;
    e. the results of any competitive tender process undertaken as a consequence of the Expression of Interest, including:
        i. The number of tenders received,
        ii. The number of successful tenders,
        iii. The grounds upon which the tenders were accepted, and
        iv. the total quantity of each service to be contracted as a consequence of tendering;
    f. the resultant quantity to be procured from EGC; and
    g. the estimated budget for each Ancillary Service over the coming year.

4. System Management must provide some information on the successful tenders and tenderers in the Ancillary Service Procurement Plan, including a range of prices. All information should be provided at a summary level.

5. The IMO must review the Ancillary Services Procurement Plan and advise approval by 1 July of each year.

6. Should the IMO require System Management to amend the Ancillary Service Procurement Plan, the IMO must do so in sufficient time to allow approval of the plan to be obtained by 1 July of each year.

7. The IMO must consult with System Management before requiring any amendment to the Ancillary Services Procurement Plan.

8. The IMO must publish the approved Ancillary Services Procurement Plan.

6 ANCILLARY SERVICES CONTRACTS

1. All Ancillary Service providers other than EGC who wish to provide Ancillary Services to the SWIS market must enter into a contract with System Management covering those services. The contract will cover all commercial and technical matters relevant to the supply, and be consistent with Market Rules and this Procedure.

2. Where System Management has entered into an Ancillary Service Contract, System Management must report the capacity of each Ancillary Service contracted, and the prices and terms for calling on the relevant Facility to provide that capacity to the IMO [**MR 3.11.10**].

3. Where a situation arises during the year outside the normal tendering and procurement process where System Management finds it necessary to enter into a new Ancillary Services contract, System Management will inform the IMO of this and the principal details of the contract as set out in (2) above.

4. The commercial terms under which EGC must supply Ancillary Services to System Management are set out in the Market Rules.

6.1 Provision of Ancillary Services without a contract

1. Under a Normal Operating State or High Risk Operating State, all Ancillary Services required by the SWIS will be provided either by EGC Facilities as an obligation under the Market Rules or by other facilities under a separate Ancillary Service contract.

2. Under an Emergency Operating State as defined within the Market Rules and in the Power System Security Procedure, System Management may direct a Market Generator to provide Ancillary Services where that facility is physically capable of providing such services, regardless of whether that Generator has an Ancillary Service contract with the relevant facility or not [**MR 3.5.5(a)**]. In all cases, Participants must comply with the instruction or direction given by System Management subject to section 8.4 of the Power System Security Procedure.

6.2 Contracts for the Supply of Ancillary Services

1. System Management must prepare a standard bilateral contract to be used for all situations where System Management contracts to purchase Ancillary Services from a Non-EGC Participant or an Ancillary Service Provider.

2. As much as practical, the contract should use standard terms and conditions.

3. The contract should set out the following, as a minimum:

    a. a technical description of the applicable Ancillary Service;
    b. the performance requirements of the Ancillary Service;
    c. testing of performance and compliance of the service;
    d. the facilities from which each service will be provided;
    e. the process by which Ancillary Services will be made available;
    f. the process by which Ancillary Services will be dispatched;
    g. the post-event information both parties must provide;
    h. the prices and payment structure;
    i. information disclosure;
    j. commercial terms and conditions; and
    k. resolution of disputes.

4. The contracts must conform to the Market Rules, and the supply capability of Ancillary Services must be consistent with the Ancillary Service information contained in Appendix 1 (Standing data) of the Market Rules.

6.3 Arrangements for the supply of Ancillary Services from EGC

1. The commercial terms under which EGC provides Ancillary Services to System Management are set out in the Market Rules.

2. System Management must set out in the Power System Operation Procedure-EGC Dispatch, the salient details of the arrangements by which EGC will make available its Ancillary Services for scheduling and dispatch. The EGC Facilities providing the services should be specified in the Ancillary Service Supply plan which EGC provides to System Management as part of that Procedure (see Section 5 of the EGC Dispatch Procedure).

7. TRANSITIONAL ANCILLARY SERVICES ARRANGEMENTS FOR FIRST YEAR OF MARKET OPERATIONS

1. System Management may undertake a transitional procurement process for the first year's operation of the SWIS market. If, in the view of System Management following consultation with the IMO, market development within the SWIS has not reached the stage where full implementation of section 5 of this procedure is not practical or warranted, this transitional arrangement may be extended.

2. Under the transitional arrangement:

    a. System Management will not undertake the Expression of Interest and Competitive tender process set out in this procedure;

    b. EGC must supply to the SWIS market all the Ancillary Services needed in the transitional period beyond those services contracted by System Management as Interruptible Loads; and

    c. System Management may enter into new contracts for Interruptible Load services so that the level of contracted interruptible load available is at least maintained from the level at the commencement of the market. System

Management may enter into a contract for such services at any time during the transitional period.

3. Any new contract that extends the quantity of Interruptible Load available to System Management must meet the criteria for procurement set out in section 5.3 of this procedure.

4. Where System Management enters into an Ancillary Service contract with an Ancillary Service provider during the transitional period, System Management must review the arrangements that exist with EGC to account for any reduction in the quantity of Ancillary Services needed from EGC.

5. Any change to the arrangement must be in line with the Ancillary Service cost formulae and obligations on EGC set out in the Market Rules and Section 8 of this procedure.

8. ANCILLARY SERVICE BUDGETS

1. Market Rule 3.13 sets out the basis of the payment the IMO will make to System Management for the Ancillary Services needed to be procured to meet the Ancillary Service Requirements.

2. System Management must prepare a draft budget covering the costs of all Ancillary Services that will be required to meet the Ancillary Service Requirements and in the initial phase of the market, obtain approval from the Shareholding Minister. Following commencement of the three year review period, approval of the annual allowable revenue is to be obtained from the Economic Regulation Authority [**MR 2.23**].

3. Where Ancillary Service budget costs are determined by future market prices, such as in the setting of the reserve capacity price for each coming year, System Management should seek cost forecasts of these from the IMO. System Management should also highlight those areas of its budgets where there is a high degree of uncertainty, such as with possible Dispatch Support Service costs.

4. Following approval of allowable revenue, System Management must submit its draft budget to the IMO by the 30 April prior to the start of the financial year.

5. System Management must submit an update of its budget estimates with its Ancillary Service Performance Report required to be submitted to the IMO by the 1 June prior to the financial year.

9. REVIEW OF ANCILLARY SERVICES PERFORMANCE AND COSTS

1. By 1 June each year, System Management must submit to the IMO an Ancillary Services Performance Report containing information on [**MR 3.11.11**]:

    a. the quantities of each Ancillary Services provided in the preceding year, including Ancillary Services provided under Ancillary Service Contracts, and the adequacy of these quantities;

b. the total cost of each category of Ancillary Services provided, including Ancillary Services provided under Ancillary Service Contracts, in the preceding year;
c. the Ancillary Service Requirements for the coming year and the Ancillary Services Procurement Plan to meet those requirements; and
d. the budget approved in accordance with MR 2.23 for providing Ancillary Services for the coming year.

2. The IMO must audit System Management's determination of the Ancillary Service Procurement Plan submitted to the IMO as part of the Ancillary Services Performance Report. The IMO may require System Management to amend the Ancillary Service Procurement Plan and resubmit it to the IMO.

3. Where System Management is required to amend the Ancillary Services Performance report, this should be carried out as soon as practical and resubmitted to the IMO.

4. In requiring System Management to amend the Ancillary Services Procurement Plan, or any other part of the Ancillary Service Performance Report, IMO must recognize and have due regard for commitments already made by System Management through the detailed contract discussions it has had with prospective new Ancillary Service Providers, as well as contracts it may have entered into.

5. System Management should endeavour to have obtained the IMO's approval of the Ancillary Service Performance Report, including the Ancillary Service Procurement Plan, prior to 20 June to allow finalisation of contracts. It must have obtained approval no later than 1 July [**MR 3.11.13**].

6. The IMO must publish the approved report as soon as practicable [**MR 3.11.13**].

10. DISCLOSURE OF INFORMATION

1. In performing its functions under the Market Rules, System Management may be required to disclose certain information to Market Participants and Network Operators. In choosing the information which may be disclosed, System Management will utilise best endeavours and act in good faith to disclose only the information reasonably required by the application of the Market Rules.

APPENDIX 1

TECHNICAL DESCRIPTION OF ANCILLARY SERVICES

1. LOAD FOLLOWING SERVICE

1. Load Following Service is the service of frequently adjusting the output of one or more Scheduled Generators within a Trading Interval so as to match total system generation to total system load in real time in order to correct any SWIS frequency variations.[MR 3.9.1]

2. Load Following Service will perform the task of immediate frequency regulation as well as compensating in the shorter term for any underlying load ramping or reduction that is present at the time.

3. The objective of Load Following Service is to maintain frequency in the SWIS system within the normal operating band of 49.8 to 50.2 Hertz over the interval between successive merit order dispatch instructions. To achieve this objective, the service must have the capability of rapidly increasing or decreasing output in order to compensate for those short term variations in demand and generation output, including non-scheduled facilities, that cause variations in SWIS frequency.

4. Load Following Service must also operate to maintain the aggregate SWIS time error within 10 seconds.

1.1 Performance Requirements

1. The Load Following Service will normally be provided at any one time by a single Provider. Where more than one Provider has made available services, System Management reserves the right to dispatch the services concurrently, with the overall requirement being met by the sum of the services from both Providers.

2. The Load Following Service provided by a Provider may be supplied from a single generating unit or combination of generating units, or by generating units from a combination of Generating Facilities.

3. The performance objectives of a Load Following Source are to:

    a. maintain the frequency as close to 50 Hertz as possible, but within the normal frequency operating band at all times.

    b. Maintain the aggregate time error within 10 seconds, and return the time error to zero at least twice per day.

    c. Ensure the service is maintained in good operating order

    d. operate continuously when in the load following mode.

4. All technical information provided by the Provider must be consistent with information provided to the IMO as facility Standing Data.(Appendix 1 of the Market Rules)

1.2 Technical Specification

1. The Load Following source must:

    a. have designated generating units providing the service;

    b. be able to initiate Load Following action within 5 seconds of receiving a frequency response signal;

    c. have a minimum MW regulating rate of 5 MW per minute;

    d. have a control system that meets the requirements of (1.3) below;

    e. have frequency monitoring and time error equipment that measures and records frequency and time error;

    f. have demonstrated through operational tests, trials or experience, the ability to carry out the service;

    g. ensure the load following equipment, including frequency control and monitoring facilities, is maintained in good operating order;

    h. keep the frequency and time error data recorded at the facility for at least 30 days, and when requested by System Management, provide that data to System Management;

    i. operate in accordance with details of contract with System Management, or arrangements with EGC.

1.3 Control Device

1. Each Generating unit or Facility that forms part of a Load Following Service should be fitted with frequency regulating equipment that allows the generating facility to receive and act on frequency regulating signals received from System Management's automatic generating control system (AGC).

2. Where the generating facility does not have the control facilities described in (1), the facility needs to have manual control and monitoring facilities that include frequency and time error meters, and the ability to manually regulate generation output so as to meet, or assist in meeting, the frequency regulating standard of 50 +/-0.2 Hertz and maximum time error of 10 seconds.

2. SPINNING RESERVE SERVICE

1. Spinning Reserve Service is the service of holding capacity associated with a synchronised Scheduled Generator, Dispatchable Load or Interruptible Load in reserve so that the relevant Facility is able to respond appropriately when the SWIS frequency falls as a result of an unexpected event below the Normal Frequency Operating Band.

2. The aim of the Spinning Reserve Service Is to restore frequency back to within the normal frequency operating band, or close to that band, in as short a time as is practical. Prompt restoration of normal frequency will avoid problems with generator and consumer equipment operating at sustained low frequencies.

3. Spinning Reserve is split into three classes of reserve, each with its own performance requirements and specification. A single spinning reserve source may provide one, two or three of these classes of reserve.

4. Spinning Reserve will normally be provided at any one time by a number of Spinning Reserve Providers including:

    a. Interruptible load providers that have a contract with System Management for the provision of spinning reserve in the form of disconnectable load
    b. Market Generators that provide spinning reserve capacity, and include Electricity Generation Corporation and any Market Generator with a contract for the provision of this service.

2.1 Classification of Spinning Reserve

1. Spinning Reserve response is measured over three time periods following a sudden fall in frequency following a contingency event. A provider of Spinning Reserve Service must be able to meet one or more of the following performance requirements.

2. **6 second reserve** is reserve that responds appropriately within 6 seconds of a signal indicating a low frequency condition, and sustains or exceeds the required response for at least 60 seconds beyond the point at which the 6 second response is measured. The service must be close to or fully operating at the 6 second measurement point.

3. This class of spinning reserve is referred to as “6 second reserve” and its purpose is to slow down the rate of frequency fall and lessen the risk of the frequency reaching 48.75 Hertz where automatic under-frequency load shedding commences.

4. **60 second reserve** is reserve that responds appropriately within 60 seconds of a signal indicating a low frequency condition, and sustains or exceeds the required response for at least 6 minutes beyond the point at which the 60 second response is measured. The service must be close to or fully operating at the 60 second measurement point. This class of spinning reserve is referred to as “60 second reserve”.

5. The purpose of 60 second spinning reserve is to assist frequency to partially or fully recover, and remove the risk of consumer or generator equipment malfunctioning or extending the risk associated with low frequency operation.

6. **6 minute reserve** is reserve that responds appropriately within 6 minutes of a signal indicating a low frequency condition, and sustains or exceeds the required response for at least 15 minutes beyond the point at which the 6 minute response is measured. The service must be close to or fully operating at the 6 minute measurement point. This class of spinning reserve is referred to as “6 minute reserve”.

7. The purpose of “6 minute reserve” is to provide additional capacity to finally bring frequency back into the normal operating band and cope with any increases in SWIS load prior to Ready Reserve becoming available.

2.2 Performance Requirements

1. The Spinning Reserve service must at all times when in service:

    a. be able to respond within the timeframe appropriate to its class(Appendix. 2.1),
    b. be maintained in good operating order,
    c. be continuously available when instructed to be available.

2. All technical information provided by the Provider must be consistent with information provided to the IMO as Facility Standing Data.(Appendix 1 of the Market Rules)

2.3 Technical Specification

1. A spinning reserve service must meet the following technical requirements:

    a. Have designated load or generating units providing the service
    b. Have frequency monitoring equipment that measures frequency within 0.1 Hertz of actual, and triggers spinning reserve at frequency levels agreed within contract.(or with Electricity Generation Corporation)
    c. Operate in accordance with details of contract with System Management (or with Electricity Generation Corporation)
    d. For Interruptible loads, have system in place for communicating post event details of operation to System Management.

2.4 Measurement and control of Spinning Reserve

1. A provider of spinning reserve service must be capable of verifying capacity of spinning reserve service, if requested to by System Management

2.5 Control Devices For Spinning Reserve

1. Each Spinning reserve service must be fitted with a control device that activates the service at the frequency level specified in the Ancillary Service contract.

2. For generating facilities, this feature can be provided through one or both of the following, depending on the class of Ancillary Service being provided:

    a. a generator output controller that accepts signals from System Management's AGC system ordering an increase in the level of energy injected into the network when the frequency falls. The AGC action may be an "emergency" mode on the AGC scheme associated with the AGC Load Following Service. The ability to receive signals requiring a reduction in the level of additional energy input is also a requirement of the service.
    b. a governing system that monitors and controls generator(s) output such that if the frequency falls, the generator increases (or decreases) output at an agreed rate and quantity.

3. For Interruptible Load Facilities , a control device that either**:**

    a. receives a signal from a centralized System Management control device such as SCADA , or
    b. a local control device that measures frequency local to the service and initiates its own load management action based on a pre-agreed load shedding rate and quantity

3. LOAD REJECTION SERVICE

1. Load Rejection Service is the service of holding capacity in reserve which can be automatically dispatched on the occurrence of a sudden over frequency situation. The service can be provided by:

    a. Generators that can rapidly reduce output; or
    b. Dispatchable Load that can rapidly increase consumption.

2. The SWIS "over frequency" standard is to keep frequency below 51 Hertz for a single credible contingency event.

3. The aim of the Load Rejection Service is to keep frequency below 51 Hertz following for a single credible contingency event, and assist in restoring frequency to within the normal frequency operating band.

3.1 Classification of Load Rejection Reserve

1. Load Rejection Reserve response is measured over two time periods following a sudden increase in frequency caused by an event such as loss of load or loss of transmission supplying a load. A provider of Load Rejection Reserve must be able to meet one or both of the following performance requirements.

2. **6 second load rejection reserve** is reserve which can respond within 6 seconds of a signal indicating a high frequency condition, and sustain or exceed the required response for at least 6 minutes beyond the point at which the 6 second response was measured.

3. The service must be close to, or fully operational, by the time the 6 second measurement point is reached.

4. The purpose of the "6 second load rejection reserve" is to slow down the frequency rise, and keep the frequency below 51 Hertz for all credible contingency events.

5. **60 second load rejection reserve** is reserve which can respond within 60 seconds of a signal indicating a high frequency condition, and sustain or exceed the required response for at least 60 minutes beyond the point at which the 6 minute response was measured.

6. The service must be close to, or fully operational, by the time the 60 second measurement point is reached.

7. The purpose of the 60 second class of load rejection reserve is to return frequency to within the normal frequency operating band, and cope with any decreases in SWIS load in the next few minutes while System Management organizes for the possible reconnection of load, or disconnection of generation.

3.2 Performance Requirements

1. The Load Rejection Reserve service must at all times when in service: :

    a. be able to respond within the timeframe appropriate to its class

b. be maintained in good operating order
c. be continuously available when required to be available

2. All technical information provided by the Provider must be consistent with information provided to the IMO as Facility Standing Data.(Appendix 1 of the Market Rules)

3.3 Technical Specification

A Load Rejection Service must meet the following technical requirements:

a. have designated load or generating units providing the service, and
b. have frequency monitoring equipment that measures frequency within 0.1 Hertz of actual, and triggers load rejection reserve at frequency levels agreed with EGC or non-EGC Participant as appropriate, and
c. operate in accordance with details of contract with System Management (or Electricity Generation Corporation agreement);
d. for Dispatchable Loads, have a communication system in place for communicating data between the Facility and System Management.

3.4 Measurement of Load Rejection Reserve

A provider of Load Rejection Reserve must be capable of verifying the capability of load rejection service if requested by System Management

3.5 Controls For Load Rejection Reserve

1. Each Load Rejection Service must be fitted with a control device that activates the service at the frequency level specified in the Ancillary Service contract.

2. **For generating facilities,** this feature can be provided through one or both of the following, depending on the class of Ancillary Service being provided:

   a. A generating level controller that accepts signals from System Management's AGC system ordering a decrease in the level of energy injected into the network from that source.
   b. A governing system that monitors and controls generator(s) output such that if the frequency rises, the generator decreases output at an agreed rate and quantity.

4 SYSTEM RESTART SERVICE

1. System Restart Service is the ability of a Facility that is a generation system to start without requiring energy to be supplied from a Network to assist in the re-energisation of the SWIS in the event of system shutdown. [3.9.8.]

2. System Restart is a key requirement of a power system, particularly an island system like the SWIS where there are no interconnected power systems able to provide initial start up energy in the event of a partial or total black out of the state power system.

3. System Restart Ancillary Service is the capability of a generating facility to start up and energise its high voltage busbar and ultimately other high voltage substations and their connected loads without the need for energy to be supplied to the power station from sources external to the generating station.

4.1 Performance Requirements

1. The system restart service may be supplied by one or more Ancillary Service Providers

2. The system restart service must be capable of:

    a. starting up and synchronising generating units at its high voltage busbar without any power obtained from the network or local distribution system.
    b. operating at zero output for 15-30 minutes, or as instructed by System Management
    c. switching on to a de-energised network and progressively energise sections of the network from the power station busbar.
    d. Controlling the frequency within the frequency band specified in section 2.2 of the Technical Rules for an isolated island system
    e. Controlling network voltage within the normal operating levels of the network
    f. progressively increasing output as blocks of load are switched on to the islanded network
    g. be continuously available (apart from scheduled maintenance)

4.2 Technical Specification

1. All technical information provided by the provider of the service must be consistent with information provided to the IMO as Standing Data. (Appendix 1 of the Market Rules)

2. The supplier of System Restart Service must be able to:

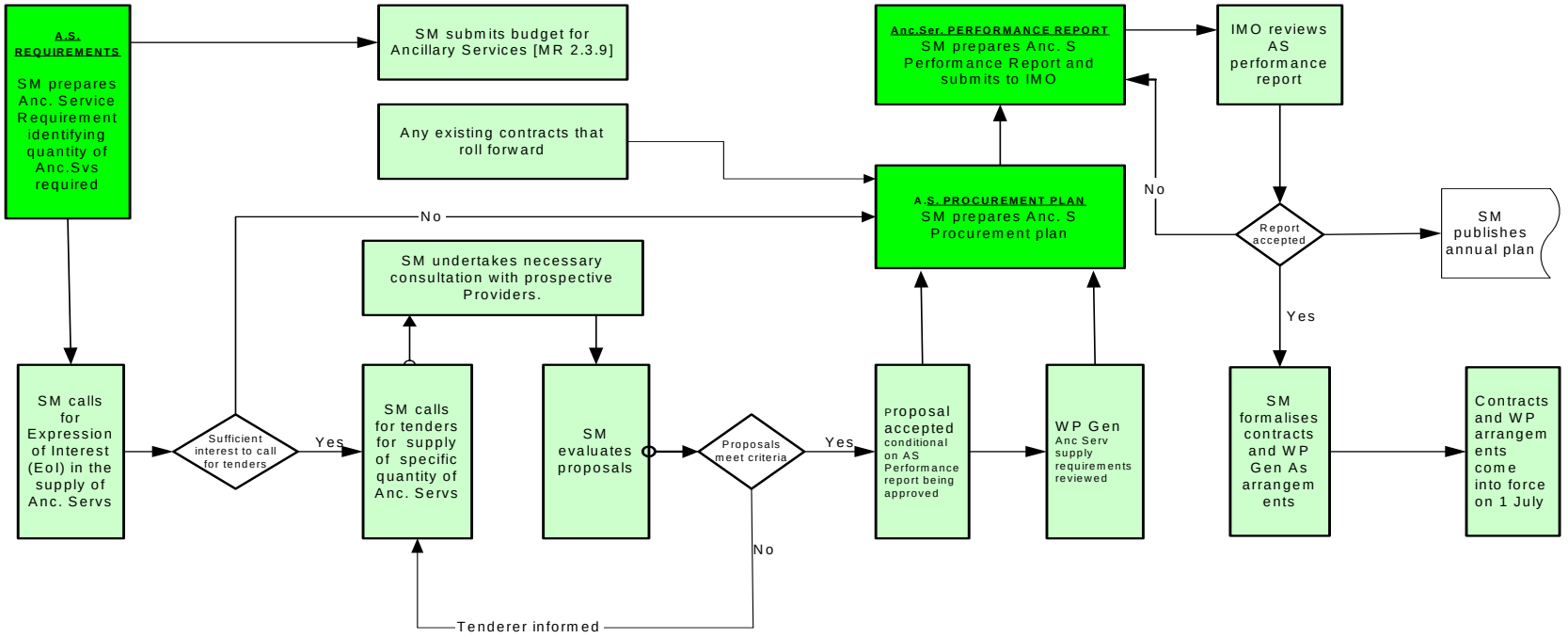
    a. start up or restart within (one hour) of an instruction from System Management and energise to a specified high voltage transmission busbar.
    b. Have a minimum generation capability of 100MW.
    c. Have the reactive capability to initially energise and load up the HV transmission circuits from the power station.

5 DISPATCH SUPPORT SERVICE

Dispatch Support Service is any other Ancillary Service that is needed to maintain Power System Security and Power System Reliability that are not covered by the other Ancillary Service categories or by the Energy Balancing Service. Dispatch Support Service is to include the service of controlling voltage levels in the SWIS, where that service is not already provided under any Arrangement for Access or Network Control Service Contract [MR 3.9.9.].

At Market Commencement, it is unclear the extent to which a Dispatch Support Service will be required.

APPENDIX II OVERVIEW OF PROCUREMENT PROCESS



ANNUAL PROCUREMENT CYCLE FOR ANCILLARY SERVICES

ELECTRICITY INDUSTRY ACT

ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

WHOLESALE ELECTRICITY MARKET RULES

Power System Operation Procedure: Ancillary Services

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.

TABLE OF CONTENTS

1. ANCILLARY SERVICES

This Ancillary Services Procedure sets out the processes that must be followed each year by System Management, Participants and Ancillary Service Providers in assessing and identifying Ancillary Service Requirements and as part of the Ancillary Services procurement process.

2. RELATIONSHIP WITH MARKET RULES

1. This Procedure has been developed in accordance with, and should be read in conjunction with, clauses 3.9 - 3.11 and 3.13 of the Wholesale Electricity Market (**WEM**) Rules (**Market Rules**).

2. References to particular Market Rules within the Procedure in bold and square brackets **[MR XX]** are current as at 1 October 2008. These references are included for convenience only, and are not part of this procedure.

3. In performing its functions under the Market Rules, System Management may be required to disclose certain information to Market Participants and Network Operators. In choosing the information which may be disclosed, System Management will utilise best endeavours and act in good faith to disclose only the information reasonably required by the application of the Market Rules.

3. SCOPE

This Procedure documents the processes as defined in the Market Rules **[MR 3.11.4]:**

a. determining Ancillary Service Requirements;
b. preparing Ancillary Service Performance Reports; and
c. entering into Ancillary Service Contracts, including the process for conducting competitive tender processes for the awarding of such contracts.

4. ASSOCIATED PROCEDURES AND OPERATING STANDARDS

a. SWIS Technical Rules and Operating Standards (Technical Rules)
b. Power System Operation Procedure – Dispatch
c. Power System Operation Procedure – EGC Dispatch
d. Power System Operation Procedure – Power System Security
e. Power System Operation Procedure – System Restart Overview

5. DESCRIPTION OF ANCILLARY SERVICES

The definitions for each of the Ancillary Services are specified in the Market Rules **[MR 3.9]**.

6. DETERMINATION OF ANCILLARY SERVICE REQUIREMENTS

The process that System Management must follow to determine the Ancillary Service Requirements is specified in the Market Rules **[MR 3.11].**

The Ancillary Service Requirements must be determined and set out each year in a report System Management submits to the IMO. The report must specify the quantity, total cost of each category, Ancillary Service Requirements, and information on the budget approved of each Ancillary Service expected to be needed to meet the Ancillary Service Standards in the trading periods and situations anticipated in accordance with the Market Rules.

The report will cover the financial year commencing on 1 July and finishing on 30 June of the year following.

6.1 Information used in the determination of Ancillary Service Requirements

1. System Management must determine the Ancillary Service Requirements in order to meet particular standards and requirements in accordance with the Market Rules **[MR 3.11.1].**

2. System Management must use the following information in its determination of Ancillary Service Requirements:

    a. Medium Term PASA studies;
    b. Equipment Limits and Security Limit information received by System Management from the IMO or Participants; and
    c. any other information that System Management considers relevant to the determination.

3. System Management may seek further information from Participants and Ancillary Service Providers in order to complete its determination of Ancillary Service Requirements where this information is relevant to the assessment.

4. Participants and Ancillary Service Providers will make every reasonable endeavour to provide this information to System Management in the form requested, and as soon as practical.

6.2 Scope of Analysis of Ancillary Service Requirements

1. In its analysis of Ancillary Service Requirements, System Management must have regard to the conditions and situations applying during the year, including:

    a. the commissioning or decommissioning of new facilities;
    b. the performance of facilities that give rise to the need for additional Ancillary Services;
    c. the risk associated with non-availability or non-performance of Ancillary Service sources;
    d. the variability and predictability of demand on the SWIS; and
    e. any other factor System Management reasonably considers necessary.

2. Other factors that System Management must have regard to are defined in the Market Rules **[MR 3.11.5].**

3. System Management must set out in the Ancillary Service Requirements report submitted to the IMO the assumptions and circumstances that were relevant to System Management's determination of quantities.

4. System Management must submit its Ancillary Services Requirements to the IMO as part of the Ancillary Services Performance Report by 1 June each year in accordance with the Market rules **[MR 3.11.11]**.

5. The requirements that must be followed by the IMO and System Management when auditing the Ancillary Service Requirements are defined in the Market Rules **[MR 3.11.6]**.

6. The IMO audit must be a consultative process aimed at ensuring that an outcome suitable to the IMO and System Management is obtained as soon as practical after the Ancillary Service Requirements have been made available for audit.

7. Where System Management is required to amend the Ancillary Services Requirements, this should be carried out as soon as practical and resubmitted to the IMO.

8. In requiring System Management to amend the Ancillary Services Requirements, or any other part of the Ancillary Service Performance Report, the IMO must recognise and have due regard to commitments already made by System Management through the detailed contract discussions it has had with prospective new Ancillary Service Providers, as well as contracts it may have entered into.

6.3 Preparation and Approval of Ancillary Service Procurement Plan

1. System Management must prepare an Ancillary Service Procurement Plan setting out how it proposes to meet the Ancillary Service Requirements for the forthcoming financial year and submit it to the IMO alongside the Ancillary Services Performance Report **[MR 3.11.7** and **MR 3.11.11]**.

2. In addition to the information specified in the Market Rules **[MR 3.11.7]** the Ancillary Services Procurement plan must set out for each Ancillary Service:

    a. the net quantity of Ancillary Services needing to be procured from EGC and any other contract sources
    b. the results of any "Expression of Interest" process undertaken; and
    c. the results of any competitive tender process undertaken as a consequence of the Expression of Interest.

3. The requirements that the IMO and System Management must follow to review and approve the Ancillary Services Procurement Plan are specified in the Market Rules **[MR 3.11.12].**

4. The IMO must consult with System Management before requiring any amendment to the Ancillary Services Procurement Plan and must do so in

sufficient time to allow approval of the plan to be obtained within the time specified in the Market Rules **[MR 3.11.13].**

6.4 Reassessment of Ancillary Service Requirements

1. During the period over which the Ancillary Service Requirements apply, System Management must monitor the conditions giving rise to its determination.

2. The Market Rules provide for the circumstances in which System Management may reassess the level of Ancillary Service Requirements during the year in accordance with the Market Rules **[MR 3.11.3]**.

3. Where System Management considers that changes to circumstances are significant and in System Management's view may give rise to adverse effects on Power System Security or Power System Reliability, System Management must prepare a report to the IMO setting out the circumstances and making a recommendation to revise the Ancillary Service Requirements.

4. System Management may recommend to the IMO one or more actions to improve the situation described in section 6.3.3 of this Procedure, examples of which are:

    a. contracting or arranging additional Ancillary Service;
    b. operating with reduced security levels; and
    c. restricting the actions of a Participant or Participant's Facility that might be giving rise to the increased need for Ancillary Services.

5. The IMO must consider and respond to System Management's proposal for corrective action as soon as practical. Any proposed amendment by the IMO to System Management's recommendation must be agreed with System Management.

6. System Management must undertake the agreed course of action as soon as practical after it is approved by the IMO.

7. ANCILLARY SERVICE PROCUREMENT PROCESS

7.1 Procurement Process

1. System Management must procure Ancillary Services where it considers that it:
    a. cannot meet the Ancillary Service Requirements through utilising Electricity Generation Corporation facilities and contracted facilities; or
    b. can obtain a less expensive alternative to Ancillary Services provided by the Electricity Generation Corporation.

2. System Management must consider whether section 7.1.1(b) of this Procedure applies every year and include its views within the Ancillary Services Performance Report, prepared pursuant to the Market Rules **[MR 3.11.11]**.

3. System Management must give consideration to using a competitive tender process for the procurement, if System Management considers that doing so would minimise the cost of meeting the Ancillary Service Requirements.

4. Where System Management determines to use a competitive tender process, the following phases will apply (with the exception of year 1 when transitional arrangements apply):

    a. the issuing of an Expression of Interest;
    b. the calling of competitive tenders (if required);
    c. the assessment of tenders according to the criteria in the Market Rules and as published during the procurement process; and
    d. the formalising of the necessary contracts and agreements.

5. System Management may vary or otherwise not proceed with any of the phases of the competitive tender process where System Management considers that adherence to the phases of the competitive tender process would not seek to minimise the cost of meeting the Ancillary Service Requirements.

7.2 Expression of Interest

1. Where System Management determines to use a competitive tender process, it must first issue a request for an Expression of Interest for the supply of the relevant Ancillary Service.

2. The request must be published on System Management's website, and in any other form that System Management considers advisable.

3. System Management must provide the necessary consultation and assistance where requested by respondents to assess the capability of their facilities to meet the technical specification.

4. System Management must determine from the responses to the request for Expression of Interest whether there is sufficient interest to proceed with a competitive tender. In making this determination, System Management must give due weight to:

    a. the likelihood of the respondents meeting the technical requirements of the Ancillary Services;
    b. the need to minimise the cost of procuring the necessary Ancillary Service Requirements and meet the commercial criteria which the tendered services will be subject to; and
    c. whether sufficient Ancillary Services will be available from Electricity Generation Corporation and other contracted sources.

5. System Management must complete its evaluation of the responses to the Expression of Interest within a reasonable period of time.

6. System Management will prepare a short-list of parties to be invited to compete in the subsequent competitive tender, based on responses received in the Expression of Interest process.

7. System Management may publish a notice advising of its conclusion on whether to proceed with a competitive tender process following the completion of its evaluations.

7.3 Competitive Tenders

1. If a decision is made to continue with a competitive tender process, System Management must issue a request for tenders at the earliest practical date following the evaluation of responses received in the Expression of Interest process.

2. The request for tenders for the supply of one or more Ancillary Services should be provided by letter and electronic form to parties who have been short-listed during the Expression of Interest process

3. The request for tenders should be accompanied by:

    a. a template contract covering the Ancillary Services for which tenders are sought; and
    b. a description of the tender assessment criteria.

7.4 Assessment criteria

1. System Management should apply transparent criteria when evaluating a tender for supply of an Ancillary Service. To be acceptable, the minimum requirements of a proposal are that it should meet the technical requirements set out in the standard form Ancillary Service Supply Contract and the requirements specified in the Market Rules **[MR 3.11.8** and **MR 3.11.8A].**

2. The factors listed above are not exclusive, and System Management may take into account any other factor consistent with the objectives of the Market Rules.

3. System Management must document the results of its evaluations, including the reasons for accepting or rejecting each contract proposal.

8 ANCILLARY SERVICES CONTRACTS

8.1 Contracts for the Supply of Ancillary Services

1. System Management must prepare standard form contracts to be used for situations where System Management contracts to purchase Ancillary Services.

2. The contract should set out the following, as a minimum:

    a. a technical description of the applicable Ancillary Service;
    b. the performance requirements of the Ancillary Service;
    c. testing of performance and compliance of the service;
    d. the facilities from which each service will be provided;
    e. the process by which Ancillary Services will be made available;
    f. the process by which Ancillary Services will be dispatched;
    g. the post-event information both parties must provide;

h. the prices and payment structure;
i. information disclosure;
j. commercial terms and conditions; and
k. a mechanism for resolution of disputes.

8.2 Contracts for the Supply of Spinning Reserve and Load Following Ancillary Services

1. In addition to the requirements in the Market Rules, Ancillary Service Providers other than the Electricity Generation Corporation who wish to provide Load Following and Spinning Reserve Ancillary Services to the SWIS market must enter into a contract with System Management covering those services. The contract will cover all commercial and technical matters relevant to the supply, and be consistent with Market Rules and this Procedure.

2. The requirements that System Management must follow where an Ancillary Service Contract has been entered into are specified in the Market Rules **[MR 3.11.10].**

3. The commercial terms under which EGC is obliged to supply Load Following and Spinning Reserve Ancillary Services are set out in the Market Rules.

8.3 Provision of Ancillary Services without a contract

1. Under a Normal Operating State all Ancillary Services required by the SWIS will be provided either by EGC Facilities as an obligation under the Market Rules or by other facilities under a separate Ancillary Service contract.

2. Under a High Risk Operating State or Emergency Operating State as defined within the Market Rules **[MR 3.4** and **MR 3.5]** and in the Power System Operation Procedure – Power System Security, System Management may direct a Market Generator to provide Ancillary Services to the extent necessary to return to a Normal Operating State where that facility is physically capable of providing such services, regardless of whether that Facility has an Ancillary Service contract.