INDEPENDENT MARKET OPERATOR

Concept Paper: Outage Planning Phase 2 – Outage Process Refinements

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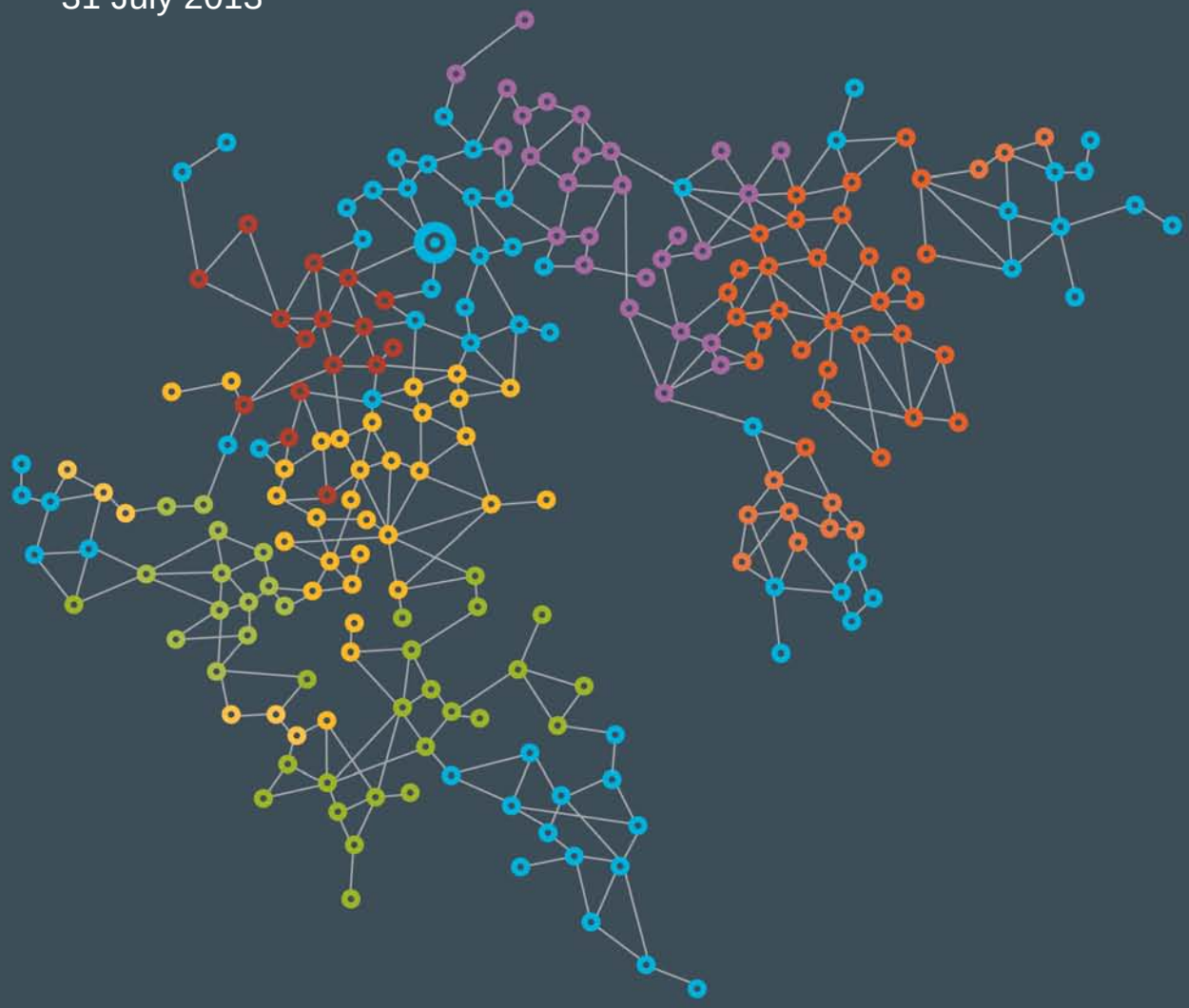

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1. Introduction

1.1. Background

In accordance with clause 3.18.18 of the Wholesale Electricity Market (WEM) Rules (Market Rules), during 2011 the Independent Market Operator (IMO) completed the first five year review of the outage planning process as described in the Market Rules and supported by the Power System Operation Procedure (PSOP): Facility Outages (2011 Outage Planning Review).

The review, completed by PA Consulting in October 2011, assessed the performance of the outage planning process since market start against the Wholesale Market Objectives. The review included an assessment of the need for, and the nature of, any reforms to the outage planning process. Overall, PA Consulting concluded the WEM outage planning process was working well, but could benefit from some "fine tuning" in the areas of outage planning information transparency and the technical functioning of the outage planning process[1].

Following on from the completion of the review, the IMO began to consider a range of reforms to the outage planning process. In addition to the recommendations made by PA Consulting, the IMO also considered several outage planning issues that were either identified internally or else raised by members of the Market Advisory Committee (MAC) in response to an IMO request in June 2012. A summary of the original PA Consulting recommendations and the additional issues identified is available in Appendix 1 of this concept paper.

The IMO has undertaken a phased approach to implementing reforms to the outage planning process. The first set of reforms was progressed through the Rule Change Proposal: Transparency of Outage Information (RC_2012_11). The Amending Rules for RC_2012_11, which are due to commence on 1 October 2013, will introduce new standards for the disclosure of information relating to outages of Scheduled Generators and Non-Scheduled Generators, aimed at improving transparency in the market. Improvements to the level of information disclosure in the market place on outages are expected to improve the efficiency of the market and allow for enhanced risk management. In turn, these changes should result in more efficient pricing outcomes, to the benefit of both Market Participants and energy consumers. Further details are available on the following webpage: http://www.imowa.com.au/RC_2012_11.

The second phase of the reform process, currently under consideration by the IMO and the subject of this concept paper, concerns:

- technical changes to the outage planning process, aimed at providing greater flexibility for Rule Participants in outage planning; and
- clarification of the obligations on Rule Participants around the outage planning process.

This concept paper is intended to:

- provide background information and context on the 2011 Outage Planning Review;
- provide an update on the status of the outage planning issues in the consolidated list

[1] PA Consulting, 2011, Independent Market Operator – Five Year Outage Planning Review – Final Report, p. iii

provided to MAC members in the papers for the 11 July 2012 MAC meeting;

- discuss the recommendations and issues considered by the IMO, in consultation with System Management, as part of this second phase of the reform process;
- outline the IMO's proposed response to the recommendations and issues considered in this phase; and
- provide stakeholders with an opportunity to engage in the reforms via the MAC process by providing a discussion framework and inviting comment on pertinent issues.

1.2. Structure of document

The remainder of the document is structured as follows:

- section 2 provides an overview of outage planning in the WEM;
- section 3 provides a summary of the 2011 Outage Planning Review findings and recommendations;
- section 4 provides a summary of the progress to date in addressing PA Consulting's recommendations and the additional outage planning issues and recommendations identified since the completion of the review;
- section 5 discusses the recommendations and issues considered as part of the second phase of the outage planning reform process, and outlines the IMO's proposed response, including proposed amendments to the Market Rules, to address these recommendations and issues; and
- section 6 outlines the next steps in the outage planning reform process.

2. Overview of Outage Planning in the WEM

Outage planning is a critical feature of robust electricity system management, and is essential for ensuring adequate system reliability and supply. However, outage planning is a complex process which typically involves detailed and comprehensive pre-planning to minimise the frequency and length of outages in the system. Consequently, to ensure the WEM is able to operate effectively, an outage planning process is provided for in the Market Rules.

The legislative framework for the outage planning process in the WEM is principally contained in two documents:

- the Market Rules: specifically, sections 3.18 and 3.19, which prescribe the outage scheduling and approval processes; and
- the PSOP: Facility Outages, which puts into practice the operation of the processes outlined in sections 3.18 and 3.19 of the Market Rules.

The outage planning process is divided into two components. The first is the outage scheduling process. This covers the long-term component of outage planning and requires Market Participants to submit outage plans to System Management up to three years in advance of the proposed

outage.

The second, short-term component is the outage approval process. The outage approval process requires Market Participants to apply to System Management to approve previously scheduled outages (Scheduled Outages) or unscheduled, "opportunistic" outages (Opportunistic Maintenance).

Further details of the outage planning and approvals process are outlined in the 2011 Outage Planning Review – Final Report[2], the Market Rules[3] and the PSOP: Facility Outages[4].

3. 2011 Outage Planning Process Review

3.1. 2011 Review

Clause 3.18.18 of the Market Rules requires the IMO, in conjunction with System Management, to complete a review of the outage planning processes against the Wholesale Market Objectives at least once in every five year period from the commencement of the energy market. Each review must include a technical study of the effectiveness of the criteria in clause 3.18.11 and a broad consultation with Rule Participants.

In fulfilment of its obligations, the IMO engaged PA Consulting to undertake the review of outage planning process. The review entailed an initial round of meetings with those involved in the outage planning process, a review of outage planning processes against the Wholesale Market Objectives, analysis of available relevant data and the subsequent development of recommendations. PA Consulting undertook extensive stakeholder consultations throughout the review process, including convening a public workshop.

PA Consulting delivered its Final Report to the IMO in October 2011.

3.2. Outcomes of the Review

Overall, PA Consulting found that the outage planning process had been working well since market start, from both the perspective of System Management as the operator of the process, and Market Generators and Western Power as the users of the process.

Building on this finding, ultimately PA Consulting concluded that the outage planning process was not in need of any wholesale change, but would stand to benefit from a degree of "fine-tuning" in certain areas[5]. The IMO considers this is an important point to note when considering the recommendations: *any changes arising from this review should seek to consolidate the strength in the current design of the outage planning process, and the performance of the outage planning process to date.*

Broadly, PA Consulting's recommendations were focused on four areas:

- improved disclosure of outage information;

[2] Available at http://www.imowa.com.au/5yearoutageplanningreview
[3] Available at http://www.imowa.com.au/market-rules
[4] Available at http://www.imowa.com.au/sm_psop
[5] PA Consulting, 2011, Independent Market Operator – Five Year Outage Planning Review – Final Report, p. 13

- generator and network outage planning interaction, including recommendations relating to System Management's obligations around records of relevant system components, and a review of the Electricity Transfer Access Arrangements between Western Power and Market Generators;

- outage approval timelines, including the recommendations on the timeframe between System Management granting an approval and the outage commencing, the cut-off times for On the Day Opportunistic Maintenance (ODOM) requests, changes to the nature of generator assurances about availability sought by System Management, and the ability for Opportunistic Maintenance to span two Trading Days; and

- consideration of the Reserve Margin, in particular if the level at which the Reserve Margin is being set is resulting in economic inefficiencies or compromises to system security.

4. Progress to date and additional issues

The IMO considered that increasing outage planning information transparency was a more significant reform than implementing the technical changes PA Consulting recommended to "fine tune" the outage planning process. Accordingly the first phase of the reform process was focused on changes to provide greater transparency of outage information. A Concept Paper: 2011 Outage Planning Review Recommendations – Information Transparency (CP_2012_01) was presented to the MAC at its 13 June 2012 meeting, followed by a Pre Rule Change Proposal at the 11 July 2012 meeting.

The Rule Change Proposal: Transparency of Outage Information (RC_2012_11) was submitted into the rule change process on 30 July 2012. The Amending Rules for RC_2012_11 were approved by the IMO Board on 16 April 2013 and are due to commence on 1 October 2013.

The IMO, in consultation with System Management, has now commenced the second phase of the reform process.

During the MAC discussion of CP_2012_01, it was agreed that the IMO should provide to MAC members the list of issues to be considered in Phase 2 of the outage planning reforms, and that MAC members should provide to the IMO any additional issues they wished to have included on the list for consideration.

Following the completion of this consultation process, the IMO updated the list of issues to reflect the feedback provided by MAC members. A revised issues list was presented to the MAC at its 11 July 2012 meeting.

Since the July 2012 MAC meeting, some of the recommendations and issues on the list have been addressed by the IMO and System Management. The IMO and System Management have however identified and added to the list a number of further issues around the outage planning process.

An updated list, showing all the outage planning process recommendations and issues identified to date and their current status, is available in Appendix 1 of this concept paper. A brief summary of the issues already addressed or to be addressed separately is provided below. The remaining recommendations and issues fall within the scope of this concept paper and are discussed in section 5.

4.1. Recommendations and issues already addressed

4.1.1. Improved disclosure of outage information - Scheduled Generators and Non-Scheduled Generators

As noted above, the Amending Rules for RC_2012_11 will commence on 1 October 2013. The amendments provide for the publication by the IMO of timely information on Planned Outages, Forced Outages and Consequential Outages of Scheduled Generators and Non-Scheduled Generators.

To ensure that the outage information provided by System Management to the IMO is as timely and accurate as possible, System Management is currently progressing amendments to the PSOP: Facility Outages, to strengthen the requirements on Market Participants to record outage information in the System Management Market Information Technology System (SMMITS) in a timely manner.

4.1.2. Reserve Margin – Consideration of fuel composition

PA Consulting recommended in its Final Report that, in the interests of transparency, System Management should consider expanding the PSOP: Facility Outages to include how fuel composition factors into its considerations in the outage approval process.

As part of the Procedure Change Proposal: Replaced PSOPs: Competitive Balancing and Load Following Market 3 (PPCL0023), System Management amended section 9 of the PSOP: Facility Outages to provide the recommended clarification of how it considered fuel in its evaluation of Outage Plans. The amended PSOP commenced on 1 July 2012.

4.1.3. Generator and network outage planning interaction - Role of ETACs

In its discussion of generation and network outage planning and their interaction, PA Consulting expressed the view that the Electricity Transfer Access Contract (ETAC) which exists between the Network Operator and each of the generators should play the primary role in managing the interaction between the Network Operator and affected generators. Specifically, it should set out clearly the rights and obligations of each party in the event of a transmission outage which affects the generator.

PA Consulting recommended that the ETACs should be reviewed, to ensure that they provide a sound basis for the management of the interaction between transmission outages and the transmission services provided by the Network Operator to the Market Participants.

As neither the IMO nor System Management has any involvement in the determination of ETACs, on 28 August 2012 the IMO sent a letter to Western Power advising it of PA Consulting's recommendation.

In its response to the IMO, dated 12 October 2012, Western Power expressed the view that the high level provisions of the ETAC relating to the interaction of transmission outages and network services are sufficient. However, Western Power considered that the detailed management of outage scheduling is an operational matter and did not agree with PA Consulting's statement that "ETACs should play the primary role in managing the interaction between the network operator and affected generators". A copy of Western Power's response to the IMO is available on the following webpage: http://www.imowa.com.au/5yearoutageplanningreview.

4.1.4. Incentives for plant availability

The Economic Regulation Authority (ERA) made the following recommendation on the outage planning process in its 2011 Report to the Minister for Energy on the effectiveness of the WEM[6]:

> *The incentives for plant availability created by the inter-relationship between the Reserve Capacity Mechanism and Reserve Capacity Refund payments should be reviewed by the Reserve Capacity Mechanism Working Group (RCMWG). Specifically, the working group should consider whether the design of the Reserve Capacity Mechanism provides appropriate incentives for plant availability and whether a refund regime that links refund payments to system conditions would improve incentives for availability.*

The IMO has addressed the ERA's concerns through the progression of the Rule Change Proposal: Incentives to Improve Availability of Scheduled Generators (RC_2013_09). RC_2013_09 was submitted into the rule change process on 18 June 2013. In its 2012 Report to the Minister the ERA noted its support for the actions taken by the IMO to address this issue[7].

The IMO also intends to progress changes to the Market Rules to implement a dynamic Reserve Capacity refund regime, in line with the recommendation arising from the work of the RCMWG.

4.1.5. Clarification of Planned Outage limit in clause 4.27.3

Clause 4.27.3 specifies that a Market Participant holding Capacity Credits for a Facility which "has been unavailable due to Planned Outages for more than 1000 hours during the preceding 12 calendar months" may, in certain circumstances, be required to file performance monitoring reports with the IMO. The IMO identified that the definition of Planned Outage in this clause should be enhanced to make it clear that both full and partial outages were to be considered (and how).

This issue has also been addressed in RC_2013_09: Incentives to Improve Availability of Scheduled Generators.

4.1.6. Inclusion of clause 3.18.2A facilities in Forced and Consequential Outage Definitions

The IMO identified that the definition of a Forced Outage in clause 3.21.1 and of a Consequential Outage in clause 3.21.2 should be extended to include facilities to which clause 3.18.2A relates. The definitions referred only to Facilities and items of equipment on the list described in clause 3.18.2 (Equipment List), which are required to be subject to outage scheduling by System Management. Clause 3.18.2A refers to various small generator facilities that are not included on the Equipment List but are still required to report Forced Outages and Consequential Outages.

The amendments to clauses 3.21.1 and 3.21.2 were progressed through the Rule Change Proposal: Consequential Outage Correction (RC_2012_04). The Amending Rules for RC_2012_04 commenced on 1 September 2012.

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[6] ERA, 2011 Annual Wholesale Electricity Market Report for the Minister for Energy, p. xxiii
[7] ERA, 2012 Wholesale Electricity Market Report for the Minister for Energy, p. 11

4.2. Recommendations and issues to be addressed separately

4.2.1. Improved disclosure of outage information – transmission and distribution network

Due to concerns about excessive costs, complexity and implementation delays, the scope of the final proposal for RC_2012_11 was narrower than that of the original Rule Change Proposal, which also sought to include transmission and distribution network outages. The IMO however intends to continue investigating options to increase the transparency and availability of outage information in these areas separately.

4.2.2. Definition of a Forced Outage

The IMO identified a need to clarify the definition of a Forced Outage in the Market Rules, to cover anything that either limits:

- System Management's ability to dispatch a facility; or
- a facility's physical capacity to generate,

which is not the result of a Planned Outage or a Consequential Outage.

This issue is being addressed in a separate Concept Paper: Availability, Outages and Constraint Payments for Non-Scheduled Generators (CP_2013_05).

5. Recommendations and issues considered in Phase 2

5.1. Timelines for Opportunistic Maintenance requests

In its Final Report, PA Consulting recommended that:

- the IMO should give consideration to an amendment to clause 3.19.2(b) to the effect that on-the-day Opportunistic Maintenance may be requested any time on the Trading Day or after 10:00 am on the Scheduling Day; and
- the IMO should propose a rewording of clause 3.19.3A(b) to the effect that Opportunistic Maintenance can be granted over any 24 hour period, irrespective of whether it overlaps Trading Days.

A number of Market Participants have further suggested that the IMO remove the 24 hour limit on Opportunistic Maintenance altogether, so that a Planned Outage of any length could be requested at any time.

The IMO does not agree with the removal of the 24 hour limit on Opportunistic Maintenance. As noted by PA Consulting, removing all time constraints on Opportunistic Maintenance risks undermining the scheduled maintenance process and the incentive to apply for an outage at the earliest possible time. In particular, the change would tend to reduce the visibility of significant upcoming outages to other Market Participants, reducing their ability to assess these outages and amend their own plans accordingly. Removing the 24 hour limit would also make it easier for a Market Participant to use a Planned Outage to avoid Capacity Cost Refunds. The IMO is not convinced that the benefits of additional flexibility would outweigh these risks.

The IMO does however agree that the changes recommended by PA Consulting will improve the efficiency of outage planning process, by removing two unnecessary restrictions on Opportunistic Maintenance requests. Accordingly the IMO proposes to amend the Market Rules to:

- allow requests for Opportunistic Maintenance to be made during the period between 10:00 am on the Scheduling Day and the start of the Trading Day; and

- allow Opportunistic Maintenance requests to be for any period, up to 24 hours in length, which starts within the relevant Trading Day.

It should be noted that the IMO is not proposing any change to the requirement under clause 3.19.4 for System Management to approve or reject a Planned Outage request and inform the participant of its decision *as soon as practicable*. The IMO notes that System Management has documented its timelines for the approval of outage requests in the PSOP: Facility Outages. The timelines give a participant certainty about when it can expect a response from System Management to an outage approval request submitted at a specific time. For example, System Management commits to respond to an Opportunistic Maintenance request submitted between 6:00 am and 10:00 am on the Scheduling Day by 12:00 pm on that Scheduling Day.

The IMO does not propose that the changes should create any additional resourcing requirements for System Management. Instead the IMO proposes that System Management revise its current approval timelines to provide as flexible a result as possible given its current staffing arrangements. For example, during preliminary discussions with the IMO, System Management suggested that it should have no difficulty in processing Opportunistic Maintenance requests received between 10:00 am and 3:00 pm on the Scheduling Day by 5:00 pm on that day, one hour before the Balancing Horizon is extended to cover the relevant Trading Day.

It should also be noted that System Management will retain the ability to reject an Opportunistic Maintenance request if it is unable to assess the impact of the request in the time available. Market Participants will need to bear this in mind when making such requests, particularly as the proposed amendments will allow Opportunistic Maintenance requests to be made for periods that extend well into the day after the Trading Day in which the outage commences.

5.2. Interaction between Outages and Balancing Submissions

Under the current Market Rules, an on-the-day Opportunistic Maintenance (ODOM) outage requested under clause 3.19.2(b) “must not require any changes in scheduled energy or ancillary services”. Prior to 1 July 2012, System Management was able to determine the compliance of an Independent Power Producer (IPP) Facility with this requirement from its Resource Plan. However, since the implementation of the Balancing Market the determination is not so simple, as the scheduled output of an IPP Facility is no longer determined by its Resource Plan but by its relative position in the Balancing Merit Order (BMO).

Although a Market Participant may bid capacity that is intended to be unavailable due to an ODOM request at a high price (to limit the likelihood that it will be dispatched), the capacity is still available for dispatch, which in some situations may force System Management to exercise discretion in determining whether an ODOM request meets the requirements of clause 3.19.2(b)(ii). Further, in order to allow Forecast BMOs to be as accurate as possible it is essential that Market Participants provide the market, through their Balancing Submissions, with as much forewarning as possible of capacity that is expected to be unavailable for dispatch due to an outage.

For these reasons, the IMO considers that in general any capacity subject to a Planned Outage request should appear as “unavailable” in the Forecast BMO. The only exception to this general rule would be for a Facility undertaking a Commissioning Test after significant maintenance, where the Facility may still be on a Planned Outage.

The reason for requiring the relevant capacity to be bid as unavailable prior to approval of the outage is that it is expected these requests will be approved more often than not, and so making the capacity unavailable in the BMO earlier will improve transparency and the likely accuracy of the forecast Balancing Price. This approach also removes the requirement on System Management to exercise discretion about the likelihood of a Balancing Facility being dispatched based on its position in the Forecast BMO.

The IMO therefore proposes the following arrangements.

- If a Market Participant has requested a Planned Outage then it must bid the capacity to be de-rated as unavailable for any relevant Trading Intervals in the Balancing Horizon.

- If a Market Participant wishes to apply for Opportunistic Maintenance for a period within the current Balancing Horizon, it must first amend its Balancing Submissions to make the relevant capacity unavailable.

- System Management must not approve a Planned Outage request if the capacity to be de-rated is available in the Forecast BMO for any of the relevant Trading Intervals.

- If System Management rejects a request for a Planned Outage covering Trading Intervals in the Balancing Horizon, then if the Market Participant has time (i.e. before Balancing Gate Closure) it must amend its Balancing Submissions to make the capacity available or else log a Forced Outage.

The Market Rules currently allow a request for Opportunistic Maintenance to be made up to one hour before the proposed start of the outage. Under the above arrangements, if a request was rejected after Balancing Gate Closure then the Market Participant would be required to log a Forced Outage and the capacity would not be available to System Management for dispatch. There are several possible approaches for dealing with this concern, including:

- continuing with the current deadline for Opportunistic Maintenance requests, on the basis that Market Participants should be able to manage this risk, particularly following the implementation of RC_2012_11;

- setting a deadline for approving or rejecting Opportunistic Maintenance requests of at least 30 minutes before Balancing Gate Closure for the first Trading Interval of the outage (i.e. 2.5 hours before the start of the outage, which may reduce to one hour with the proposed move to half hour gate closure) – this would ensure that a Market Participant has time to amend its Balancing Submission if a request is rejected; or

- setting a slightly longer deadline, for example one hour before Balancing Gate Closure for the first Trading Interval, to allow time for a Market Participant whose request is rejected to amend its Balancing Submission and for other Market Participants to see the revised Forecast BMO before Balancing Gate Closure.

Discussion Point 1: the IMO seeks the views of MAC members on the appropriateness of the current deadline for the submission and approval of Opportunistic Maintenance requests, and the proposed alternatives.

5.3. Advanced approval of Scheduled Outages

In its Final Report, PA Consulting recommended that "System Management should consider amendments to the PSOP: Facility Outages and, if necessary, the Market Rules to allow a limited number of advanced-approval outages per Facility per year". The recommendation was made in response to concerns raised by Market Participants, who suggested that a two day window for the approval of Scheduled Outages may be too short for the following reasons:

- Market Participants may have to fly in specialists to undertake the maintenance - these specialists often require more than two days notice, and may be flown in only to realise that the outage has been moved to another date or rejected; and

- to cover its bilateral obligations, a Market Participant may need to purchase bilateral contracts for the duration of a Scheduled Outage. In the event that the outage does not proceed, the participant may end up with surplus contracts.

Alinta, in feedback provided to the IMO in June 2012, noted its concern that clause 3.19.12, which allows Market Participants to apply for compensation where an outage logged more than 12 months in advance is cancelled in the 48 hours leading up to the start of the outage, fails to achieve its intended purpose. For example, if a major Planned Outage was cancelled by System Management even within three to four weeks prior to its anticipated commencement date, Alinta suggested that the Market Participant would likely incur significant unavoidable costs (e.g. maintenance crews, potential environmental and occupational health impacts and bilateral purchases). For this reason, Alinta considered that the "48 hour rule" should be amended to allow the Market Participant to specify the minimum required notice period, which should be limited to a specified maximum period, for example 30 days.

After considering the recommendations and discussing the current arrangements with System Management, the IMO is not convinced that the recommended changes are justified, for the following reasons.

- System Management has advised the IMO that it can, and often does approve Scheduled Outages earlier than two days prior to the start of the outage. However, System Management is never able to guarantee that an approved outage will be able to proceed, and may always need to reject an outage it has previously approved to ensure system security and reliability. The IMO notes that there are strict rules governing the circumstances under which System Management can reject a Scheduled Outage, whether approved or accepted.

- With the improved outage transparency provided by the implementation of RC_2012_11, Market Participants will be able to assess the relative priority of their Scheduled Outages and the likelihood that a particular outage may be cancelled. This will allow Market Participants to better assess and manage the risks associated with undertaking major maintenance activities.

- System Management has advised the IMO that the cancellation of a Scheduled Outage

requested over a year in advance is an extremely rare event. It is unclear as to the extent to which this issue is actually affecting Market Participants, based on evidence provided to the IMO to date.

- Finally, increasing the minimum notice period for the cancellation of Scheduled Outages above 48 hours would shift the costs of outages cancelled within the extended notice period from the relevant Market Participant to the market as a whole. The IMO is not convinced that further socialising these costs would better achieve the Wholesale Market Objectives.

For these reasons, the IMO does not propose any change to the Market Rules around the early approval or cancellation of Scheduled Outages.

5.4. Criteria for approval of Planned Outages

PA Consulting raised two concerns about the implicit requirement in the PSOP: Facility Outages for a Facility to be available prior to a Planned Outage commencing. The PSOP states that "System Management may at its sole discretion require a Market Participant's or Network Operator's authorised personnel included in the relevant contact list to make a written declaration that the unit is available prior to the outage commencing".

PA Consulting supported System Management's efforts to identify and reject outage requests made principally to avoid exposure to refunds rather than to perform (discretionary) maintenance, but suggested that the current PSOP requirement:

- *creates an incentive to apply for outages which are longer than needed:* PA Consulting noted that while the requirement to be available while requesting an outage translates to an inability to extend an existing outage, there is no such prohibition on shortening outage periods. PA Consulting considered that this asymmetry creates an incentive to apply for an outage period longer than is likely to be required, which in turn can reduce the availability of outage slots for other Market Participants[8]; and

- *adds cost to the provision of generation:* In particular, PA Consulting considered that the inability to apply for Opportunistic Maintenance while on a Forced Outage means that generators are compelled to make their plant available again as soon as possible, so as to minimise Reserve Capacity refund payments. Specifically, this encourages them to make short term temporary fixes to the problem, then apply for an outage to fix the problem properly whereas it would have made most sense to fix the problem properly in the first instance.

PA Consulting recommended that:

- System Management should develop for consideration by the IMO proposed changes to sections 13.5, 14.7 and 15.5 of the PSOP: Facility Outages to the effect that the written declaration pertain to the period of the outage, rather than a period prior to the outage commencing;

[8] System Management has advised that in practice it does approve some extensions to Scheduled Outages, using its discretion as to whether to require an availability declaration.

- given the interaction with the capacity market and the incentive for Market Participants to manipulate the Market Rules to avoid exposure to Reserve Capacity refunds, the requirement to provide a written declaration should be mandatory; and

- in the interests of transparency and facilitating compliance monitoring, all such declarations should be published by System Management.

Additionally System Management, in feedback provided to the IMO, sought greater clarity on its obligations with respect to:

- clause 3.18.7, which requires Outage Plans submitted by a Market Participant or Network Operator to represent its good faith intention to remove from service, or de-rate, the relevant Facility of item of equipment, for maintenance; and

- clause 3.19.3A(c), which permits System Management to decline to approve an Opportunistic Maintenance request where it considers the request has been made principally to avoid exposure to Reserve Capacity refunds, rather than to perform maintenance.

In particular, System Management sought clarity around the approval of extensions to Scheduled Outages. System Management also suggested that its ability to reject an Opportunistic Maintenance request under clause 3.19.3A(c) should be extended to cover Scheduled Outages.

On the other hand, some Market Participants have proposed that the criteria for granting a Planned Outage should not include any consideration of the current availability of the Facility, e.g. a Market Participant could seek approval for a Scheduled Outage or Opportunistic Maintenance, subject to the normal timelines and consideration of the reserve margin, regardless of the physical state of the Facility. Some participants have further suggested that it should be possible to convert a Forced Outage to a Planned Outage retrospectively where the reserve margin was sufficient at the time of the outage.

The IMO does not agree that the availability of a Facility should be ignored when considering a request to approve a Planned Outage, for the following reasons.

- Market Generators receive Reserve Capacity payments in return for making their Facilities available to the market. While a reasonable level of maintenance is necessary, the IMO's view is that where a Facility's capacity is not available to the market due to a plant failure it is not providing the service for which it is being paid, and so some amount of Reserve Capacity refund is appropriate. The IMO notes that the proposed implementation of a dynamic Reserve Capacity refund regime will allow the actual refund levels to better reflect the relative value of the de-rated capacity at the time of the outage, as well as providing an additional incentive to improve reliability through the proposed mechanism for redistributing Reserve Capacity refunds.

- Allowing Market Participants to avoid refunds associated with plant failures reduces the incentives for Market Participants to maintain a high level of plant availability and to retire unreliable or obsolete Facilities.

- Even where the reserve margin is adequate, the unavailability of capacity can increase clearing prices in the Short Term Energy Market (STEM) and Balancing Market, particularly where the de-rating is unexpected. By reducing the reserve margin, the unexpected

de-rating of capacity also increases the risk that a further generation plant failure may result in a price spike.

- Information about whether an outage is discretionary (and so can be cancelled or recalled if necessary) or not assists System Management in maintaining system security and reliability.

The IMO therefore considers that a Market Participant with capacity unavailable to the market due to plant issues should be liable for Reserve Capacity refunds, albeit at a rate that is better sculpted to reflect the prevailing reserve margin.

The IMO agrees with PA Consulting that the requirement on a Market Participant requesting a Planned Outage should be that the relevant capacity would otherwise be available during the outage period requested, rather than prior to it. In other words, if the request was rejected by System Management the Market Participant should not be in a position where it needed to log a Forced Outage for the relevant period. The IMO also agrees with System Management that it is reasonable for this requirement to apply to both Scheduled Outages and Opportunistic Maintenance.

The IMO considers that the requirement to be "otherwise available" should extend beyond the specific situations in which System Management currently requests a written availability declaration. Accordingly, the IMO proposes to strengthen the Market Rules to support the following arrangements.

- By requesting approval for a Planned Outage, a participant would be deemed to be making a declaration of its "good faith expectation" that the relevant capacity (which may be part or all of the Facility's capacity) would be otherwise available for dispatch for the duration of the proposed outage. Two exceptions would be permitted:
    - where a Planned Outage is timed to align with a network outage, and the Facility would otherwise be subject to a Consequential Outage; and
    - where a Scheduled Outage is the extension of a previous Scheduled Outage. Initially, no limit is proposed to the length of such extensions, to avoid encouraging Market Participants to request Scheduled Outages that are longer than necessary[9]. The IMO would monitor outage extensions for any abuse of this flexibility and, if necessary, propose further amendments to the Market Rules to set an overall time limit for these exemptions.
- Generally there should be no requirement for participants to provide written availability declarations, as these would be implicit in the request for approval of the outage.
- If a Facility experiences a Forced Outage after a Planned Outage has been approved but before the outage commences, then this would not affect the status of the Planned Outage.
- If a Facility experiences a Forced Outage during the period between requesting and receiving approval for a Planned Outage, the participant would be required to cancel the

[9] Note that approval of an extension outage would still be subject to the other requirements for a Scheduled Outage, such as those relating to the timing of the request and the impact on the reserve margin.

Planned Outage if it considers that the implicit availability declaration it made when it requested the approval of the outage no longer held.

- System Management will be able to reject a Planned Outage request (either for a Scheduled Outage or Opportunistic Maintenance) if it considers that the outage has not been requested to undertake maintenance or that the de-rated capacity would not otherwise be available for dispatch for the duration of the proposed outage (except in the two exceptions described above).

5.5. Obligations to participate in the outage planning process

PA Consulting recommended that "System Management should consider changes to clause 3.18.2(c)(i) to the effect that the Equipment List should be constrained to *all transmission network Registered Facilities that could limit the output of a generating facility or the participation of Demand Side Management during a planned outage*". This would remove the requirement on System Management to manage outages for transmission network equipment with no real impact on overall system security and reliability, resulting in a more efficient allocation of its resources.

Further to PA Consulting's recommendation, System Management suggested there is a need to develop a clear approach for the inclusion of network equipment in the Equipment List (e.g. SWIS circuit based rather than equipment asset based, whether only market relevant circuits should be included or all SWIS circuits, and if the former what designates market relevant). System Management considered it is also important to agree on the naming of network equipment items to be included on the Equipment List, so they can more easily be identified by Market Participants and their IT systems.

In a paper addressing two MAC action items about distribution network outages (2012-11 and 2011-29), provided to MAC members on 9 April 2013[10], System Management outlined the current outage planning arrangements for the distribution system and raised concerns about:

- potential impacts of distribution network outages on the Associated Loads of a Demand Side Programme (DSP);
- uncertainty about whether the current arrangements, whereby distribution connected generators are given three Business Days notice of distribution network outages, meets the requirements under section 3.18 for the coordination of network outages affecting other Registered Facilities (in particular clause 3.18.6(h));
- obligations on DSPs in respect of Forced Outages and Consequential Outages; and
- potential delays in a distribution connected Registered Facility receiving the notifications it requires from Western Power within the 15 calendar day window for providing notice of a Consequential Outage.

Lastly, the IMO has identified a need to clarify the obligations in the Market Rules around requesting (or reporting, where appropriate) Planned Outages and providing advance notice of a Forced Outage where appropriate.

[10] Available on the following webpage: http://www.imowa.com.au/MAC_59.

5.5.1. Demand Side Programmes and Associated Loads

Currently there is some ambiguity in the Market Rules about the definition of an outage and the outage planning obligations for a DSP. In particular, there is some uncertainty around whether a DSP is experiencing an Outage when:

- it is not consuming electricity at its Relevant Demand level; and/or
- it does not reduce its consumption in response to a Dispatch Instruction.

The IMO considers a DSP that is not consuming at its Relevant Demand level is not undergoing an Outage. While a consistently low consumption level for a DSP may be an issue that needs to be considered in relation to its Reserve Capacity Obligations, the outage framework is not appropriate for this purpose. For example, it would be absurd for System Management to refuse permission for a DSP to reduce its consumption due to a low reserve margin. It should be noted that the telemetry requirements for DSPs being proposed in the Pre Rule Change Proposal: Harmonisation of Supply-Side and Demand-Side Capacity Resources (PRC_2013_10) would provide System Management with improved visibility of the current consumption levels of each DSP.

Further, the IMO considers that a DSP should be expected to make its capacity available (i.e. reduce its consumption) whenever it is dispatched by System Management, as it is not subject to the periodic maintenance requirements affecting generators and network equipment. For this reason, the IMO considers a Market Participant should not be able to request (or notify) System Management of a Planned Outage of a DSP.

Finally, it seems unlikely that a DSP provider would in practice volunteer that a DSP would not reduce its consumption over a period if dispatched by System Management. The IMO therefore does not consider it would be beneficial to implement rules to support this concept.

Based on these considerations, the IMO does not consider that DSPs or their Associated Loads need to be included on the Equipment List, or to log Planned Outages or Forced Outages. The IMO proposes to amend the Market Rules to clarify that DSPs are not required to be included on the Equipment List and that the normal outage scheduling processes are not applicable to DSPs.

5.5.2. Transmission network equipment

The IMO agrees with PA Consulting and System Management that it is inefficient to require System Management to schedule outages for components of the transmission network which do not affect system security and reliability. The IMO also supports System Management's suggestion that the Equipment List should contain logical "SWIS circuits" rather than individual equipment assets, and considers that System Management is best placed to define these circuits and develop (in conjunction with the IMO and Rule Participants) an appropriate naming convention for them.

However, the IMO does not consider there is any need to include a transmission circuit on the Equipment List because an outage of that circuit might affect either:

- the Associated Load of a DSP; or
- a generation system other than a generation system included in the Equipment List or a generation system to which clause 3.18.2A relates.

Accordingly the IMO proposes to amend clause 3.18.2(c)(i) to require the Equipment List to include *all transmission circuits that could limit the output of a Scheduled Generator, Non-Scheduled Generator or generation system to which clause 3.18.2A relates.*

5.5.3. Distribution network equipment

Due to the complexity and redundancy in the distribution system, it may not be appropriate to identify specific items of distribution network equipment, or even distribution network "circuits", on the Equipment List. Instead, the IMO proposes the following arrangements.

- The Network Operator will be required to follow the standard outage scheduling process for any outage of the distribution system that would limit the output of a Scheduled Generator, Non-Scheduled Generator or generation system to which clause 2.30B.2(a) applies, that is on the Equipment List. This could be achieved by including a conceptual distribution "circuit" on the Equipment List for each generator on the list, but the exact method will be decided in consultation with System Management during the development of the Pre Rule Change Proposal. The outage requests should be made with reference to the generator affected.

- The Network Operator will be required to notify System Management and the relevant Market Participant of a proposed outage of the distribution system that will limit the output of a Scheduled Generator, Non-Scheduled Generator or generation system to which clause 2.30B.2(a) applies, that is not on the Equipment List. A notification is to be provided at least three Business Days in advance of the proposed outage.

- The requirements around the reporting of Forced Outages for distribution system equipment are less certain, and will depend on the extent to which System Management requires this information to be provided by the Network Operator proactively, either for the "real time" management of system security and reliability, or to assist in the determination of Consequential Outages for distribution connected Facilities. For example, it may be appropriate to require the Network Operator to report Forced Outages of the distribution system that affect a generation system on the Equipment List.

Discussion Point 2: the IMO seeks the views of MAC members on the extent to which a Network Operator should be required to proactively report Forced Outages of its distribution system.

5.5.4. Requirement to follow the outage planning process

The obligation on a Rule Participant to request (or report, as appropriate) a Planned Outage prior to undertaking discretionary maintenance is not explicit in the Market Rules, although it is implied by various clauses such as clause 3.19.8, which obliges a participant to comply with System Management's decision to reject an outage request, except where this would endanger the safety of any person, damage equipment, or violate an applicable law.

While previously this has not been considered an issue due to the financial advantages of being granted a Planned Outage, with the progression of RC_2013_09 a generator that has breached its 36 month Planned Outage limit will be liable for Facility Reserve Capacity Deficit Refunds for a Planned Outage, reducing the financial incentive to follow the normal outage processes.

The IMO proposes to strengthen the Market Rules as necessary to clarify the requirement for a

participant to follow the outage scheduling processes, and in particular to request a Planned Outage before making capacity unavailable to perform discretionary maintenance.

5.5.5. Early notification of Forced Outages

The requirement on a participant to inform System Management of a Forced Outage or Consequential Outage under clause 3.21.4 does not explicitly account for situations where the participant is aware that the outage will occur prior to its commencement, for example where System Management has rejected a request to extend a Scheduled Outage and the participant is aware that the Facility will be unable to return to service by the end of the current Planned Outage.

The IMO proposes to amend clause 3.21.4 to clarify that a participant must inform System Management of a Forced Outage or Consequential Outage as soon as practicable after it becomes aware of the outage, which may be before the start of that outage.

5.6. Other issues

The IMO has identified several minor issues relating to outage planning in the Market Rules, which it proposes to correct as part of Phase 2 of the reform process. These include issues 17, 18 and 20 in Appendix 1 of this concept paper.

The IMO also considers that two of the recommendations listed in Appendix 1 are actually general design principles, which will need to be taken into account in the development of any Rule Change Proposals or Procedure Change Proposals for Phase 2. These are:

- issue 14: the ability to be on a partial Forced Outage at the same time as being on a partial Planned Outage needs to be clarified in the Market Rules and PSOP; and
- issue 20: “Greater clarification of the outage approval process”.

6. Next steps

The IMO recommends that the MAC:

- discuss the actions proposed by the IMO in response to the recommendations and issues considered in this concept paper;
- consider the specific discussion points raised in sections 5.2 and 5.5.3; and
- note that the IMO will:
    - continue working with System Management to refine details and costings for the proposals outlined in this concept paper; and
    - prepare a Pre Rule Change Proposal to be presented to the MAC in October 2013.

Appendix 1. Update on List of Issues presented at 11 July 2012 MAC meeting

(Note: new issues identified since 11 July 2012 are shown in red, while issues outside the scope of Phase 2 are shaded in grey.)

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
Information Disclosure				
1	PA Consulting	The IMO, in conjunction with System Management and Market Participants, should develop a change to the Market Rules establishing System Management's obligations with respect to the disclosure of information on Planned Outages. Corresponding protocols within the PSOP: Facility Outages should be made, setting out how the new obligations are to be discharged by System Management. The type of information should include: • The status of the Planned Outage, the equipment affected, the time periods affected, the capacity involved and the resultant net operating margin. • Information on historic Forced and Planned outages. • Information on major network outages, including whether any generators are unable to generate due to the outage. The frequency of the information published should be sufficient to inform participants about the extent to which the system can accommodate both longer term and short term opportunistic outages. The form and mode of publication is likely to be web-based, probably using the existing SMMITS system. Information should be readily downloadable, with numerical and graphical representations.	• Publication of information will help generators 'self-sort' their planned outages to preserve the reliability of the electricity system (efficient allocation of resources). • Reduces pressure on System Management to resolve/facilitate conflicts in outage requests. • Would improve transparency and confidence in outage planning processes. • Would bring WEM in line with global norms.	Progressed in Phase 1 for Scheduled Generators and Non-Scheduled Generators, through the Rule Change Proposal: Transparency of Outage Information (RC_2012_11). The Amending Rules for RC_2012_11 will commence on 1 October 2013. Increased transparency of outage information for other facility types to be progressed in a separate phase.

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
Reserve Margin				
2	PA Consulting	System Management should consider expanding the PSOP to include how fuel composition might factor into its considerations in the outage approval process	• To improve transparency and confidence in the outage approval process.	Included into revised PSOP: Facility Outages (PPCL0023). The amended PSOP commenced on 1 July 2012.
Generation and network outage planning and interaction				
3	PA Consulting	System Management should consider changes to clause 3.18.2(c)(i) to constrain the Equipment List to "all transmission network Registered Facilities that could limit the output of a generating facility or the participation of Demand Side Management during a planned outage".	• Would allow System Management to manage only the transmission network equipment that would have an impact on the output of a generating facility during a planned outage (i.e. more efficient allocation of SM resources).	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.5.2 of this report.
4	PA Consulting	ETACs between Western Power and generators should be reviewed to ensure that they provide a sound basis for the management of the interaction between transmission outage and the transmission services provided by the Network Operator to the Market Participants.	• Network outages should be coordinated with generators. • ETACs should play the primary role in managing the interaction between the network operator and affected generators. • Should set out the rights and obligations of each party in the event of a Transmission outage which affects Generation.	Refer to section 4.1.3 of this report.

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
Outage approval process, timelines and constraints				
5	PA Consulting	System Management should consider amendments to the PSOP and, if necessary, the Market Rules to allow a limited number of advanced-approval outages per Facility per year. These advanced-approval outages would be subject to the normal outage scheduling process.	• Participants have indicated current timelines can be insufficient. • Participants often submit their Resource Plans for a Trading Day without knowing whether their outage request will be approved. • Participants may get left with surplus bilateral contracts for outage that doesn't proceed. • Participants may have set in place logistical arrangements for maintenance to proceed only to find their outage plan is turned down.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.3 of this report.
6	PA Consulting	The IMO should consider amending clause 3.19.2(b) to the effect that on-the-day Opportunistic Maintenance may be requested any time on the Trading Day or after 10:00 am on the Scheduling Day.	• Will improve the interaction of day-ahead and on-the-day opportunistic maintenance outage timelines. • Improve market participant maintenance planning and certainty.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.1 of this report.

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
7	PA Consulting/ System Management	System Management should develop for consideration by the IMO proposed changes to Section 13.5, 14.7 and 15.5 of the PSOP: Facility Outages to the effect that the written declaration pertain to the period of the outage, rather than a period prior to the outage commencing. The requirement to provide a written declaration should be mandatory. All such declarations should be published by System Management. Heads of power provided under the Market Rules to allow System Management to require a declaration of a Facility's availability (in MW).	• Time periods requested for in outage applications will align more closely with time periods needed for the outage. • Would allow generators to fix problems properly in the first instance.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.4 of this report.
8	PA Consulting	The IMO should propose a rewording of clause 3.19.3A(b) to the effect that Opportunistic Maintenance can be granted over any 24 hour period, irrespective of whether it overlaps Trading Days.	• Would allow maintenance that is opportunistic and short term to span two days (e.g. from 10:00 am to 10:00 am). • Would better achieve the intent of the clause to ensure that requests for Opportunistic Maintenance are in fact opportunistic in nature.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.1 of this report.
9	Griffin Energy/ System Management	Ability to convert Forced Outages to Planned Outages System Management requests clarification of the principle in clause 3.19.3A which allows System Management to decline an Opportunistic Maintenance request where it considers it has been made principally to avoid capacity refunds. A similar clause is required for Scheduled Outages.		To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.4 of this report.

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
10	System Management	Clarity around approval of Planned Outage extensions. System Management raises the following issues for consideration: • Availability at the commencement of the extension? • When an extension is considerably longer than the initial outage duration which originally involved a small risk of non-return to service?	• Improved clarity of the outage approval process. • Reduced incentives to request longer outages than necessary. • Avoidance of the use of Planned Outages to avoid Reserve Capacity refunds.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.4 of this report.
11	Alinta	Removal of artificial distinction between different categories of Planned Outages and providing System Management with greater flexibility in approving Planned Outages. Specifically, Alinta considers that System Management should be able to consider and approve a "planned" outage request based solely on an assessment of the proposed outage against the criteria specified in clause 3.18.11 - provided System Management considered it had sufficient time prior to the proposed commencement of the outage to adequately assess the outage request. As part of removing the distinctions between the different "categories" of "planned" outages (i.e. moving towards a single definition of a planned outage), the existing limitations inherent in the different outage categories should be removed. For example, restrictions on the duration of an outage, other than when deemed necessary based on an assessment against the criteria in clause 3.18.11, should be removed. Further, and again other than as an outcome of an assessment against the criteria in clause 3.18.11, System Management should not be able to decline a request for an outage simply because a Facility had suffered a Forced Outage. *Note interaction of this recommendation with Issue 6, 7 and 8.*	• Improved efficiency of overall outage approval process. • Removal of Opportunistic Maintenance would simplify the outage approval process.	To be considered as part of Phase 2 of the IMO's implementation. Refer to sections 5.1 and 5.4 of this report.

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
12	ERA	The incentives for plant availability created by the inter-relationship between the Reserve Capacity Mechanism and the Reserve Capacity Refund payments should be reviewed by the Reserve Capacity Mechanism Working Group. Specifically, the Working Group should consider whether the design of the Reserve Capacity Mechanism provides appropriate incentives for plant availability and whether a refund regime that links refund payments to system conditions would improve incentives.	• Improved availability of Scheduled Generators to the market.	In progress. Refer to section 4.1.4 of this report.
Rule Clarifications				
13	IMO internal	The definition of a Forced Outage should be clarified in the Market Rules to cover anything that either limits: • System Management's ability to dispatch a facility; or • a facility's physical capacity to generate, which is not the result of a Planned Outage or Consequential Outage.	• Improved integrity of the Market Rules and greater clarity over what constitutes a Forced Outage.	Addressed in the Concept Paper: Availability, Outages and Constraint Payments for Non-Scheduled Generators (CP_2013_05). Refer to section 4.2.2 of this report.
14	IMO internal	The ability to be on a partial Forced Outage at the same time as being on a partial Planned Outage needs to be clarified in the Market Rules and PSOP.	• Improved integrity of the Market Rules and better understanding of how the processes apply for partial outages	This is a general design principle which will be taken into account in the development of any Rule Change Proposals or Procedure Change Proposals for Phase 2. Refer to section 5.6 of this report.

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
15	IMO internal	Clause 3.21.4 requires that Forced Outages and Consequential Outages must be logged by the Participant where applicable for facilities: • "on the list described in clause 3.18.2" the Equipment List; and • "to which clause 3.18.2A relates" - generators or Intermittent Loads under 10MW nameplate capacity. However, clauses 3.21.1 and 3.21.2 define Forced/Consequential Outages as outages to facilities on the list described in clause 3.18.2. The IMO to consider expanding the definitions of Forced/Consequential Outage to include both sets of facilities that are required to log them.	• Improved integrity of the Market Rules.	Addressed through the Rule Change Proposal: Consequential Outage Correction (RC_2012_04). Refer to section 4.1.6 of this report.
16	IMO internal	With regard to clause 4.27.3 (which specifies which Facilities may be required to file reports for Reserve Capacity performance monitoring), the definition of a Planned Outage should be clarified to make it clear that these can include both full and partial outages.	• Improved integrity of the Market Rules.	Addressed through the Rule Change Proposal: Incentives to Improve Availability of Scheduled Generators (RC_2013_09). Refer to section 4.1.5 of this report.
17	IMO internal	As Planned Outages by Facility are now public information (under the Amending Rules resulting from RC_2011_10 which removed the SWIS Restricted Confidentiality Class), clause 3.18.5D may be redundant.	• Improved integrity of the Market Rules.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.6 of this report.

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
18	IMO internal	There is some circularity between clauses 3.18.4 and 3.19.1. Clause 3.18.4 requires System Management to "maintain an outage schedule, containing information on all Scheduled Outages". Clause 3.19.1 defines Scheduled Outage as meaning outage in the outage schedule. This circularity could be addressed by amending clause 3.18.4 to "…maintain an outage schedule~~, containing information on all Scheduled Outages~~ that contains details of each Outage Plan: (a) that System Management has accepted, or accepted under certain circumstances, under clause 3,18.13; and (b) that the IMO has directed System Management to include in the outage schedule, under clause 3.18.15(f)".	• Improved integrity of the Market Rules.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.6 of this report.
19	Griffin Energy	Greater clarification of outage approval process. *Note that this will be provided through consideration of the issues relating to the outage approval timelines and constraints noted above and the other recommended clarifications to the process.*	• Improved integrity of the Market Rules and PSOPs.	This is a general design principle which will be taken into account in the development of any Rule Change Proposals or Procedure Change Proposals for Phase 2. Refer to section 5.6 of this report.
20	IMO internal	There are a number of other minor and typographical changes to clauses relating to the outage planning process that have been identified by the IMO.	• Improved integrity of the Market Rules.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.6 of this report.

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
21	Alinta	Consider whether clause 3.19.12 achieves its intended purpose of compensating Market Participants where any outage logged more than 12 months in advance is cancelled in the 48 hours leading up to the start of the outage. Alinta considers the 48 hour rule should be amended to allow the Market Participant to specify the minimum required notice period (restricted to a maximum duration – e.g. 30 days).	• Ensure adequate compensation for cancelled outages is provided.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.3 of this report.
22	System Management	There is a need to develop a clear approach for inclusion of equipment in the Equipment List (e.g. SWIS circuit based rather than equipment asset based, whether only market relevant circuits should be included or all SWIS circuits, and if the former what designates market relevant). It is also important to agree on the naming of equipment to be included so that it can more easily be identified by other Market Participants and their IT systems.	• Improved clarity and usefulness of the Equipment List. • Improved ease of administration of the Equipment List. • More efficient allocation of System Management resources.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.5 of this report.

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
23	System Management	In a paper addressing MAC Action Items 2012-11 and 2012-29 (distributed to MAC members on 9 April 2013), System Management outlined the current distribution outage planning arrangements and raised concerns about: • potential impacts of distribution network outages on the Associated Loads of a DSP; • uncertainty about whether the current arrangements, whereby distribution connected generators are given three Business Days notice of distribution network outages, meets the requirements under section 3.18 for the coordination of network outages affecting other Registered Facilities (in particular clause 3.18.6(h)); • obligations on DSPs in respect of Forced and Consequential Outages; and • potential delays in a distribution connected Registered Facility receiving the notifications it requires from Western Power within the 15 calendar day window for providing notice of a Consequential Outage.	• Improved clarity of the outage planning processes for distribution network equipment and DSPs. • More efficient allocation of Rule Participant Resources. • Improved provision of information required by Market Participants with distribution connected generators to meet their obligations in relation to outages.	To be considered as part of Phase 2 of the IMO's implementation. Refer to sections 5.5.1 and 5.5.3 of this report.
24	IMO internal	The obligation on a participant to request (or report, as appropriate) a Planned Outage prior to undertaking discretionary maintenance is not explicit in the Market Rules, although it is implied by various clauses such as 3.19.8. While previously this has not been considered an issue due to the financial advantages of being granted a Planned Outage, with the progression of RC_2013_09 a generator that has breached its 36 month Planned Outage limit will be liable for Facility Reserve Capacity Deficit Refunds for a Planned Outage, reducing the financial incentive to follow the normal process.	• Improved integrity of the Market Rules. • Ensure clear incentives to request/report Planned Outages.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.5.4 of this report.

Id	Recommended by	Issue/Recommendation	Intended outcomes/objective	Status
25	IMO internal	The requirement on a participant to inform System Management of a Forced Outage or Consequential Outage in clause 3.21.4 does not explicitly account for situations where the participant is aware that the outage will occur prior to the start of the outage, for example where System Management has rejected a request to extend a Scheduled Outage and the facility will be unable to return to service by the end of the current Planned Outage.	• Improved integrity of the Market Rules. • Ensure transparency of outage information in the market by ensuring timely reporting of Forced Outages.	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.5.5 of this report.
26	IMO	There is a lack of clarity in the current Market Rules about the interactions between Outages and the reporting of capacity as "unavailable" in a Balancing Submission.	• Improved integrity of the Market Rules. • Improved transparency and forewarning of upcoming outages. • Reduction of the need for System Management to exercise discretion in determining whether an Opportunistic Maintenance request meets the requirements of clause 3.19.2(b)(ii).	To be considered as part of Phase 2 of the IMO's implementation. Refer to section 5.2 of this report.