

Draft Rule Change Report:
Outage Planning Phase 2 – Outage Process
Refinements (RC_2013_15)

Standard Rule Change Process 16 May 2019

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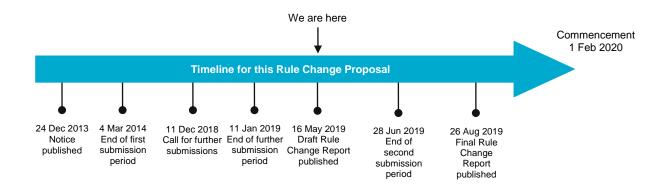
1. Rule Change Proposal, Process and Timeline

On 24 December 2013, the Independent Market Operator (**IMO**) submitted a Rule Change Proposal titled "Outage Planning Phase 2 – Outage Process Refinements" (RC_2013_15). The Rule Change Proposal seeks to implement a number of reforms to the Wholesale Electricity Market (**WEM**) outage planning processes to improve their transparency, flexibility, consistency and efficiency.

The Rule Change Proposal is being processed using the Standard Rule Change Process, described in section 2.7 of the Market Rules. The timeframes for the first submission period and the preparation of the Draft Rule Change Report were extended by the IMO under clause 2.5.10; and the timeframe for the preparation of the Draft Rule Change Report was further extended by the Rule Change Panel under clauses 1.18.3(b) and 2.5.10. Further details of the extensions are available on the Rule Change Panel's website.

On 11 December 2018, the Rule Change Panel published a call for further submissions on this Rule Change Proposal (**CFFS**). The further submission period closed on 11 January 2019.

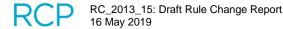
The key dates for progressing this Rule Change Proposal, as amended in the extension notices, are:



Please note that due the size and complexity of the Rule Change Proposal the Rule Change Panel has:

- extended the second submission period beyond the usual 20 Business Days to allow stakeholders enough time to consider the proposed amendments; and
- extended the publication of the Final Rule Change Report beyond the usual 20 Business
 Days to allow the Rule Change Panel enough time to develop the Final Rule Change
 Report.

All documents related to this Rule Change Proposal can be found on the Rule Change Panel's website at Rule Change: RC_2013_15 - Economic Regulation Authority Western Australia.



2. The Rule Change Panel's Draft Decision

The Rule Change Panel's draft decision is to accept the Rule Change Proposal in a modified form, as set out in section 7 of this report.

2.1 Reason for the Rule Change Panel's Draft Decision

The Rule Change Panel has made its draft decision on the basis that the Amending Rules, as modified in this Draft Rule Change Report:

- will clarify and refine the outage planning obligations of Rule Participants;
- will support the provision of more complete, timely and accurate outage information for use in Medium Term Projected Assessment of System Adequacy (PASA) studies, Short Term PASA and outage planning processes;
- will support the provision of more accurate Balancing Forecasts and Forecast Balancing Merit Orders (BMOs);
- will improve efficiency and reduce costs by removing unnecessary restrictions in the outage planning rules;
- will reduce administrative and compliance costs by removing unnecessary obligations on Rule Participants;
- will provide greater certainty to Rule Participants and reduce some of the risks associated with Planned Outages;
- is likely to encourage Rule Participants to schedule outages further in advance and to undertake an efficient level of maintenance that balances maintenance costs against the need to meet reliability obligations;
- will increase the clarity and consistency of the outage planning provisions of the Market Rules:
- have an estimated implementation cost and timeframe that will allow net benefits to be realised over the remaining period before the expected implementation of the WEM Reform Program in October 2022;
- will allow the Market Rules to better achieve Wholesale Market Objectives (a), (b) and (d):
- are consistent with Wholesale Market Objectives (c) and (e);
- were generally supported by Market Advisory Committee (MAC) members and attendees at the MAC workshops held on 17 September 2018 and 7 November 2018 to discuss the Rule Change Proposal; and
- were generally supported (albeit with some suggestions for further enhancements) by the submissions received in response to the Rule Change Panel's CFFS on the Rule Change Proposal.

Additional detail outlining the analysis behind the Rule Change Panel's draft decision is provided in section 6 of this report.



2.2 Proposed Commencement

The Amending Rules are proposed to commence at **8:00 AM on 1 February 2020**. This commencement date is provisional and may be subject to change in the Final Rule Change Report.

3. Call for Second Round Submissions and Invitation to Drafting Review Workshop

Second Submission Period

The Rule Change Panel invites interested stakeholders to make submissions on this Draft Rule Change Report.

While the Rule Change Panel seeks feedback on all aspects of the Draft Rule Change Report, the Rule Change Panel explicitly seeks stakeholder views on two issues:

- Materiality threshold for Non-Scheduled Generator outages (section 6.4.1.3):
 - whether System Management should be allowed under the Market Rules to reduce the MW materiality threshold for a Non-Scheduled Generator from the level specified in new clause 3.18.1A¹ if it considers it necessary to maintain power system security and reliability; and
 - if so, whether such decisions should be either Reviewable Decisions or subject to appeal to the Economic Regulation Authority (ERA); and
- Clarification of 'unavailable for service' (section 6.4.3.2):
 - whether the information listed in new clause 3.18.1B appropriately defines the normal operating limits of Outage Facilities² and allows a practical distinction to be made between the normal operation of an Outage Facility and a state that should be regarded as unavailable for service.

The submission period is 30 Business Days from the Draft Rule Change Report publication date. Submissions must be delivered to the RCP Secretariat by **5:00 PM** on **Friday 28 June 2019**.

The Rule Change Panel prefers to receive submissions by email, using the submission form available at: https://www.erawa.com.au/rule-change-panel/make-a-rule-change-submission sent to Support@rcpwa.com.au.

Submissions may also be sent to the Rule Change Panel by post, addressed to:

Rule Change Panel

Attn: Executive Officer C/o Economic Regulation Authority PO Box 8469 PERTH BC WA 6849

Drafting Review Workshop

The Rule Change Panel intends to hold a public workshop between **9:30 AM and 12:30 PM on Monday 10 June 2019** to review the drafting of the proposed Amending Rules for this Rule Change Proposal.

If you would like to register for the workshop, please email your name and details to Support@rcpwa.com.au by 5:00 PM on Friday 24 May 2019.

A copy of the agenda will be provided to attendees closer to the date.

This Rule Change Proposal defines an 'Outage Facility' as a Facility or item of equipment that is required to participate in outage scheduling, either through inclusion on the Equipment List under clause 3.18.2(c) or in accordance with clause 3.18.2A.



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In this report, 'new clause' means an additional clause that the Rule Change Panel proposes to include in the Amending Rules for this Rule Change Proposal.

4. **Proposed Amendments**

4.1 The Rule Change Proposal

The purpose of this Rule Change Proposal is to:

- clarify the obligations of Rule Participants around the outage planning processes;
- provide greater flexibility for Rule Participants in outage planning; and
- improve the transparency and consistency of outage planning and Balancing Market processes.

The issues addressed in the Rule Change Proposal relate to:

- obligations to participate in the outage planning process;
- interactions between Planned Outages and Balancing Submissions;
- timelines for Planned Outages;
- availability criteria for the approval of Planned Outages; and
- a number of minor enhancements to improve the integrity and clarity of the outage planning provisions in the Market Rules.

A summary of the proposed amendments is provided below. Full details of the Rule Change Proposal are available on the Rule Change Panel's website.

4.1.1 **Obligations to Participate in the Outage Planning Process**

Issue 1: Equipment List: Demand Side Programmes and Associated Loads, **Dispatchable Loads and Interruptible Loads**

Clause 3.18.2(c)(ii) of the Market Rules requires all Registered Facilities holding Capacity Credits to be included on the Equipment List, except those to which clause 3.18.2A applies.³ The clause 3.18.2(c)(ii) requirement applies not only to Scheduled Generators and Non-Scheduled Generators, but also to Demand Side Programmes, Dispatchable Loads and Interruptible Loads.

In its Rule Change Proposal, the IMO considered that Demand Side Programmes, Associated Loads or Dispatchable Loads do not need to be included on the Equipment List.4 The IMO also noted that, in practice, Interruptible Loads are only used to provide Spinning Reserve Service under an Ancillary Service Contract, and so are independently required to be included on the Equipment List under clause 3.18.2(c)(iii) (renumbered in the proposed amendments to clause 3.18.2(c)(iv)).

The IMO therefore proposed to restrict the Facilities that must be included on the Equipment List under clause 3.18.2(c)(ii) to Scheduled Generators and Non-Scheduled Generators holding Capacity Credits with a Standing Data nameplate capacity of at least 10 MW.⁵

Issue 2: Equipment List: Network equipment

Clause 3.18.2(c)(i) of the Market Rules requires "all transmission network Registered Facilities" to be included on the Equipment List. The IMO did not consider it was efficient to

Note that Interruptible Loads will continue to be included on the Equipment List under clause 3.18.2(c)(iv).



The reference to clause 3.18.2A excludes Registered Facilities with a Standing Data nameplate capacity of less than 10 MW and generation systems that supply Intermittent Loads and have a nameplate capacity of less than 10 MW.

See pages 4-5 of the Rule Change Proposal for further details.

require System Management to schedule outages for all components of the transmission system, as only some components have the potential to affect power system security and reliability.

In contrast, clause 3.18.2(c) does not require the inclusion of any components of the distribution system on the Equipment List, except where System Management considers they "must be subject to outage scheduling to maintain Power System Security and Power System Reliability" under clause 3.18.2(c)(iv) (renumbered in the proposed amendments to be clause 3.18.2(c)(v)). However, there are situations where an outage in the distribution system can limit the output of a generation system on the Equipment List.

The IMO considered that if a generation system is required to be included on the Equipment List then it follows that any network equipment (whether transmission or distribution) that could limit that generation system's output should also be on the Equipment List. However, the IMO also considered that other network equipment should only be included on the Equipment List if it is required by System Management under proposed clause 3.18.2(c)(v) to maintain Power System Security and Power System Reliability.

Accordingly, the IMO proposed to amend clause 3.18.2(c)(i) to require the Equipment List to include any transmission or distribution system equipment that could limit the output of a generation system that is on the Equipment List.

Issue 3: Requirements to follow the outage planning process

The obligation on a Rule Participant to request or report (as applicable) a Planned Outage prior to undertaking discretionary maintenance is not explicit in the Market Rules. The IMO proposed to update clause 3.18.2A(b) and include proposed clause⁶ 3.19.2A to clarify the requirement for a Market Participant to follow the outage scheduling processes.

Proposed clause 3.18.2A(b) requires a Market Participant to notify System Management of a proposed Planned Outage of a generation system to which clause 3.18.2A applies (**Small Outage Facility**)⁷ if:

- the Market Participant intends to make some or all of the Small Outage Facility's capacity unavailable; and
- the capacity would otherwise be available for the duration of the proposed outage.

Proposed clause 3.19.2A requires a Market Participant to request approval for a Planned Outage from System Management in accordance with sections 3.18 and 3.19 if:

- the Market Participant intends to make some or all of an Equipment List Facility's capacity unavailable; and
- the capacity would otherwise be available for the duration of the proposed outage.

4.1.2 Interactions between Planned Outages and Balancing Submissions

Issue 4: Balancing Submission unavailability declarations

Currently some ambiguity exists in the Market Rules around how unavailable capacity is indicated in a Balancing Submission. While various clauses imply that a Balancing Submission must indicate how much of a Balancing Facility's Sent Out Capacity is

^{&#}x27;Small Outage Facility' is the name proposed by the IMO for Scheduled Generators, Non-Scheduled Generators and generation systems serving Intermittent Loads that have a nameplate capacity of less than 10 MW and are not Equipment List Facilities. Clause 3.18.2A specifies the outage scheduling obligations for these generation systems.



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In this report, 'proposed clause' means the clause as proposed in the Rule Change Proposal for RC_2013_15.

unavailable for dispatch, clause 7A.2.4 and the Glossary definition of the term 'Balancing Submission' do not explain how this is to be done. Further, the Glossary definition suggests that for a Scheduled Generator the Balancing Price-Quantity Pairs should cover the full Sent Out Capacity of the Facility, regardless of whether any of that capacity is unavailable for dispatch.

The IMO proposed to amend the Glossary definition of a Balancing Submission and the requirements for a Balancing Submission in clause 7A.2.4, and include proposed clauses 7A.2.4A, 7A.2.4B and 7A.2.4C, to clarify how 'available' and 'unavailable' capacity are to be represented.

For a Balancing Facility that is a Scheduled Generator, the IMO proposed that for each Trading Interval the sum of the MW quantities in the Balancing Price-Quantity Pairs and the 'unavailable' quantity should equal the Sent Out Capacity of the Facility.

For a Non-Scheduled Generator, the IMO proposed that:

- the 'available' quantity provided in the single Balancing Price-Quantity Pair should reflect
 the Market Participant's estimate of its MW output at the end of the Trading Interval,
 assuming it is not dispatched down by System Management; and
- the 'unavailable' quantity should reflect any Outages but should not include that part of the Sent Out Capacity that is not expected to be reached because its fuel supply (e.g. wind or sunlight) is not at an optimal level.

The two quantities were not therefore expected to sum to the Sent Out Capacity of the Facility.

Similarly, the MW quantities in a Balancing Submission for the Balancing Portfolio were not expected to sum to the total Sent Out Capacity of the component Facilities, since these Facilities include some Non-Scheduled Generators.

The IMO proposed similar but not identical changes in the Rule Change Proposal: Removal of Resource Plans and Dispatchable Loads (RC_2014_06). The Amending Rules for RC_2014_06 were approved by the Minister for Energy on 26 November 2018 and will commence on 1 July 2019.

Issue 5: Deadline for approval of a Planned Outage

Currently the Market Rules do not set a deadline for System Management to make decisions on whether to approve a Planned Outage, although clause 3.19.2(b) sets a deadline for on-the-day Opportunistic Maintenance requests of one hour before the proposed start time. This creates a risk that a request could be rejected after Balancing Gate Closure, leaving the relevant capacity unavailable for dispatch in the BMO and the Market Participant obliged to log a Forced Outage.

The IMO proposed to amend clause 3.19.2 to set the deadline for requesting approval of an Opportunistic Maintenance request to 30 minutes before Balancing Gate Closure for the Trading Interval in which the outage is due to commence. The IMO also proposed to include a new clause 3.19.4A to prescribe that if System Management has not provided a Rule Participant with a decision on a request for approval of a Planned Outage (including a Scheduled Outage or Opportunistic Maintenance) by this time then for the purposes of the Market Rules the request is deemed to be rejected.



Issue 6: Clarification of requirements for Balancing Facilities (excluding the Balancing Portfolio)

The Market Rules are unclear about how capacity subject to a Planned Outage request should be reflected in Balancing Submissions for a Balancing Facility. The IMO considered that in general any capacity subject to an approved Planned Outage or to an outstanding request for approval of a Planned Outage should be bid as 'unavailable' capacity in the relevant Balancing Submissions.

The IMO's rationale for requiring the relevant capacity of a Market Generator to be bid as unavailable prior to approval of an outage was that:

- the IMO expected these requests will be approved more often than not, and so making
 the capacity unavailable in the BMO earlier would improve transparency and the likely
 accuracy of the forecast Balancing Price; and
- the IMO considered this approach removed any 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 also considered that any capacity declared as unavailable in a Balancing Submission (apart from minor temperature related de-ratings) should be subject to an Outage.

To achieve these outcomes, the IMO proposed clauses 7A.2.8A and 7A.2A.1 to clarify that for non-Balancing Portfolio Balancing Facilities:

- (1) a Market Generator must, for each of its Balancing Facilities and for each Trading Interval in the Balancing Horizon, use its best endeavours to ensure that, at all times, any of the Facility's capacity that is:
 - subject to an approved Planned Outage; or
 - subject to an outstanding request for approval of a Planned Outage,

is declared as unavailable in the Balancing Submission for the Facility and the Trading Interval, unless the Facility is undertaking a Commissioning Test in that Trading Interval; and

- (2) a Market Generator must, as soon as practicable after Balancing Gate Closure for each Trading Interval, for each of its Balancing Facilities that is either an Equipment List Facility or a Small Outage Facility (collectively referred to as an Outage Facility), ensure that it has notified System Management of a Forced Outage or Consequential Outage for any capacity declared unavailable in the Facility's Balancing Submission that:
 - was not subject to an approved Planned Outage or Consequential Outage at Balancing Gate Closure for the Trading Interval; and
 - is not attributable to a difference between the expected temperature at the site during the Trading Interval and the temperature at which the Sent Out Capacity for the Facility was determined.

Proposed clause 7A.2A.3 excludes from requirement (2) any capacity subject to a previously approved Planned Outage that was then rejected by System Management less than 30 minutes before Balancing Gate Closure.

On rare occasions, System Management may reject a previously approved Planned Outage under clause 3.19.5 before it commences. The IMO considered that in these situations the Market Participant should be required to update its Balancing Submission for any Trading



Intervals in the Balancing Horizon for which Balancing Gate Closure has not yet occurred, to make the relevant capacity available for dispatch.

Similarly, where the SWIS is in an Emergency Operating State or High Risk Operating State, System Management may direct a Market Participant that a Facility be returned to service early from a Planned Outage under clause 3.20.1. In these situations, the IMO considered that the Market Participant should be required to update its Balancing Submission, to reflect the change in available capacity due to System Management's direction, for any Trading Intervals for which Balancing Gate Closure has not yet occurred.

The IMO therefore proposed to add new clauses to clarify a Market Participant's obligations around its Balancing Submissions in the event of a late rejection of a previously approved Planned Outage (proposed clause 7A.2.9B) or the recall of a Planned Outage that is underway (proposed clause 7A.2.9C). The proposed clauses apply to all Scheduled Generators and Non-Scheduled Generators, including those in the Balancing Portfolio.

Issue 7: Clarification of requirements for the Balancing Portfolio

Synergy has fewer opportunities to revise its Balancing Submissions (i.e. for the Balancing Portfolio) than other Market Participants, and the deadline for these Balancing Submissions (between 4 and 9.5 hours prior to the start of the Trading Interval) falls well before Balancing Gate Closure. To require final decisions on Planned Outage approval requests for Balancing Portfolio Facilities before the deadline for Balancing Portfolio Balancing Submissions (to allow Synergy time to amend its Balancing Submission to make capacity subject to a rejected request available) would significantly limit the time window available to Synergy for Opportunistic Maintenance requests, when compared with the current arrangements.

However, the IMO considered that allowing Synergy to make material changes to Balancing Portfolio Balancing Submissions after the normal deadlines would undermine the effectiveness of these deadlines in mitigating concerns around market power. The IMO also noted that the Balancing Portfolio provides Synergy with the opportunity to optimise the dispatch of its Facilities within the Balancing Portfolio without the same restrictions as Independent Power Producer (**IPP**) Facilities about updating Balancing Submissions.

To address these concerns, the IMO proposed that the requirements for the Balancing Portfolio should be similar to those for other Balancing Facilities (taking into account the different deadlines for Balancing Portfolio Balancing Submissions) with the following exceptions:

- capacity that is subject to an outstanding request for approval of a Planned Outage should be declared as 'available' in the Balancing Submissions for the relevant Trading Intervals; and
- if Synergy receives approval of an Opportunistic Maintenance request later than its usual gate closure time, it should be required to amend its Balancing Submission for the affected Trading Intervals to make the relevant capacity unavailable, but remove the capacity from its highest price Balancing Price-Quantity Pairs, leaving its lower price Balancing Price-Quantity Pairs unchanged.

The Balancing Portfolio's requirements are specified in proposed clauses 7A.2.9(g), 7A.2.9A and 7A.2A.2.



4.1.3 Timelines for Planned Outages

Issue 8: Clarification of deadline for Scheduled Outage approval requests

The exact deadline for Scheduled Outage approval requests is unclear. Clause 3.19.1 requires a Network Operator or Market Participant to request approval of a Scheduled Outage "no later than two days prior to the date of commencement" of the outage, but no time is specified. In practice, System Management requires requests to be made by 10:00 AM on the day prior to the Scheduling Day for the Trading Day in which the proposed outage is due to commence (**TD-2**).

The IMO proposed to amend clause 3.19.1 to clarify that approval of a Scheduled Outage must be requested no later than 10:00 AM on TD-2.

Issue 9: Prohibition on Opportunistic Maintenance Outages spanning two Trading Days

Currently, clauses 3.19.2(a) and 3.19.2(b)(iii) require an Opportunistic Maintenance outage to be completed by the end of the Trading Day in which it commences. Additionally, under clause 3.19.3A(b) System Management must not approve Opportunistic Maintenance requests on two consecutive days. The effect of these clauses is to restrict the period over which an Opportunistic Maintenance outage can occur to the Trading Day within which the outage commences.

The IMO considered there is no reason to require an Opportunistic Maintenance outage to take place within a single Trading Day and proposed to amend clause 3.19.2 to allow Opportunistic Maintenance requests to be for any period up to 24 hours in length.

Issue 10: Restrictions on the timeframes for making Opportunistic Maintenance requests

Currently an Opportunistic Maintenance request cannot be made between 10:00 AM on the Scheduling Day and the start of the Trading Day. The IMO considered that this restriction was unnecessary and removing it would improve the efficiency of the outage planning process.

The IMO therefore proposed to amend clause 3.19.2 to allow a Market Participant to submit an Opportunistic Maintenance request at any time between:

- the proposed deadline for Scheduled Outage requests, i.e. 10:00 AM on TD-2; and
- the proposed deadline for System Management's decisions on Opportunistic
 Maintenance requests, i.e. 30 minutes before Balancing Gate Closure for the Trading
 Interval in which the requested outage is due to commence.

Issue 11: Restrictions on the timeframes for making consecutive Opportunistic Maintenance requests

Clause 3.19.3A(b) states that System Management must not approve Opportunistic Maintenance for an Equipment List Facility "on two consecutive Trading Days". It is not clear from the wording whether the restriction applies to the approvals or the outages, but the clause has generally been interpreted as referring to the outages.

The IMO considered it appropriate that Rule Participants should not be able to request a series of consecutive Opportunistic Maintenance outages, effectively undertaking the equivalent of a Scheduled Outage without due notice. However, the current restriction would



no longer be appropriate if Opportunistic Maintenance was allowed to span two Trading Days. The IMO therefore proposed to amend clause 3.19.3A(b) to require a 24-hour period to elapse between the end of one Opportunistic Maintenance outage for an Equipment List Facility and the start of the next.

Issue 12: Notification timelines for Small Outage Facilities

Currently clause 3.18.2A(b) requires a Market Participant to notify System Management of proposed Planned Outages for a Small Outage Facility "not less than 2 Business Days prior to their commencement". There are no provisions allowing for the equivalent of Opportunistic Maintenance for a Small Outage Facility.

The IMO considered that, for Small Outage Facilities, the notification deadlines for short Planned Outages (up to 24 hours in duration) should not exceed the Opportunistic Maintenance request deadline for Equipment List Facilities. Similarly, the IMO considered there is no necessity for the notification deadline for longer Planned Outages to exceed the deadline for Scheduled Outage approval requests for Equipment List Facilities.

The IMO therefore proposed to amend clause 3.18.2A to align the notification deadlines for Planned Outages of Small Outage Facilities with the approval request deadlines for Planned Outages of corresponding duration for Equipment List Facilities. The proposed amendments to clause 3.18.2A also clarify that a Market Participant must notify System Management if the timing of an outage changes or the outage is no longer required.

4.1.4 Criteria for Approval of Planned Outages

Issue 13: Availability declarations for Planned Outage approval requests

The IMO proposed to strengthen and clarify the requirements in the Market Rules relating to Planned Outage approval requests by adding:

- proposed clause 3.19.2B, which prohibits a Market Participant from requesting approval
 of a Planned Outage for a Scheduled Generator or Non-Scheduled Generator if the
 Market Participant does not expect in good faith that, if System Management rejected
 the request, the capacity to which the request applies would be available for dispatch for
 the duration of the proposed outage;
- proposed clause 3.18.2A(h), which imposes a similar requirement on Market Participants around notifications of Planned Outages for Small Outage Facilities; and
- proposed clause 3.19.2C, which requires a Market Participant with a Planned Outage request that has not yet been approved or rejected by System Management to immediately notify System Management and withdraw the request if it ceases to expect that the capacity would be otherwise available (e.g. in the event of a Forced Outage of the Facility).

Two exceptions were proposed in clause 3.19.2D:

- where the proposed Planned Outage will immediately follow a Scheduled Outage of the relevant capacity (i.e. the outage is effectively an extension of a Scheduled Outage); and
- where the Market Participant reasonably expects that the capacity would be subject to a Consequential Outage if the proposed Planned Outage did not proceed.

The IMO also proposed to replace clause 3.19.3A(c) with proposed clause 3.19.3B, which allows System Management to decline to approve a Scheduled Outage or Opportunistic Maintenance for an Equipment List Facility where it considers that the capacity to which the



request applies would not otherwise be available for dispatch for the duration of the proposed outage.

The IMO noted the following implications of the proposed amendments:

- Generally, there would be no requirement for Market Participants to provide written availability declarations to System Management, as these would be implicit in the request for approval of the outage.
- If a Facility experienced a Forced Outage after a Planned Outage had been approved but before the outage commenced, then this would not affect the status of the Planned Outage.
- Requests for extensions of Planned Outages would be managed as a request for a new, separate Planned Outage, and treated no differently from any other Planned Outage request except that the implicit availability declaration prescribed in proposed clause 3.19.2B would not be required. The extension outage could be either a Scheduled Outage or Opportunistic Maintenance.

The IMO did not propose any limit on the length of extension outages⁸, to avoid encouraging Market Participants to request Scheduled Outages that are longer than necessary. However, the IMO proposed to monitor outage extensions for any abuse of this flexibility and, if necessary, propose further amendments to the Market Rules in the future to set an overall time limit for these extensions.

4.1.5 Other Issues

The IMO also proposed the following enhancements to improve the clarity and integrity of the outage planning provisions in the Market Rules:

- <u>Use of defined terms:</u> the IMO proposed to create defined terms in the Glossary for Equipment List, Equipment List Facility, Small Outage Facility and Outage Facility to provide clarity and reduce unnecessary repetition in the drafting.
- Removal of unnecessary cross-references to clause 3.18.2A: the IMO proposed to amend clause 3.18.2(c) to replace two cross-references to clause 3.18.2A with their substantive meaning, i.e. that the generation systems in question must have a nameplate capacity of at least 10 MW.
- Removal of clause 3.18.5D: Planned Outage details by Facility became Public information under clause 10.5.1(zD) following the commencement of the Amending Rules for the Rule Change Proposal: Competitive Balancing and Load Following Market (RC_2011_10). The IMO therefore proposed to remove clause 3.18.5D, which allows System Management to provide a Network Operator with the Scheduled Outage information of a Market Participant's Facility, from the Market Rules on the basis that the clause was no longer required.
- Contents of System Management's outage schedule: the IMO proposed to amend clause 3.18.4 to clarify which Outage Plans are to be considered Scheduled Outages and included in System Management's outage schedule.

The IMO also proposed several other minor and typographical changes to improve the clarity and integrity of the drafting.

⁸ Apart from the usual timing requirements for Scheduled Outages and Opportunistic Maintenance.



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4.2 Changes to the Market Rules Affecting the Rule Change Proposal

Since the formal submission of this Rule Change Proposal:

- the Market Rules have changed significantly;
- Verve Energy and Synergy have merged to form a single entity;
- the market operator function has transferred from the IMO to AEMO;
- several functions have transferred from the IMO to the ERA; and
- the system management function has transferred to AEMO.

As noted in section 4.1.2 of this report, this Rule Change Proposal also affects clauses that are being created or modified by RC_2014_06, which will commence on 1 July 2019.

The Rule Change Panel notes that the Amending Rules for this Rule Change Proposal, if approved, will not commence until after 1 July 2019. The Rule Change Panel has therefore applied the proposed changes to the Market Rules as expected following the commencement of RC_2014_06 on 1 July 2019, accounting where applicable for the changes made to the Market Rules (including by RC_2014_06) since the submission of the Rule Change Proposal. A summary of the required changes to the original Rule Change Proposal drafting is provided in Appendix A of this report.⁹

The Rule Change Panel notes that the rationale for the proposed changes is, in most cases, unaffected by changes made to the Market Rules since the submission of this Rule Change Proposal, the merger of Verve Energy and Synergy, and the transfer of functions to AEMO and the ERA.

4.3 The IMO's Initial Assessment of the Proposal

The IMO decided to progress this Rule Change Proposal on the basis that Rule Participants should be given an opportunity to provide submissions as part of the rule change process.

The revised drafting has been used as the base for the further changes to the proposed Amending Rules presented in Appendix E of this report.



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5. Consultation

Although the Rule Change Panel has summarised the submissions received in the first submission period and the views expressed by the MAC in accordance with clause 2.7.7 of the Market Rules, the Rule Change Panel has reviewed this information in its entirety and taken into account each matter raised by stakeholders and the MAC in making its decision on this Rule Change Proposal.

5.1 Early Consultation on Outage Planning Issues

In 2011 the IMO, in accordance with clause 3.18.18 of the Market Rules, 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**).¹⁰

PA Consulting conducted the review, which 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, reforms to the outage planning process. The final report for the review was published in October 2011.

Extensive consultation informed the review, including an initial round of stakeholder consultation at the start of the review, a public workshop held on 24 August 2011 and a request for submissions on the draft report.

Overall, PA Consulting concluded that 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.

Following the completion of the 2011 Outage Planning Review, the IMO considered the recommendations made by PA Consulting as well as several other outage planning issues that were:

- internally identified;
- raised by members of the MAC in response to a request made by the IMO in June 2012;
 or
- subsequently raised by System Management.

The IMO adopted a phased approach to the implementation of 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). RC_2012_11, which commenced on 1 October 2013, introduced new standards for the disclosure of information relating to outages of Scheduled Generators and Non-Scheduled Generators, aimed at improving transparency in the market.

This Rule Change Proposal represents the second phase of the IMO's outage planning reforms.

Documents related to the 2011 Outage Planning Review are available on the ERA's website at https://www.erawa.com.au/electricity/wholesale-electricity-market/methodology-reviews/5-year-outage-planning-review-review-undertaken-by-imo.



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5.2 MAC Consultation by the IMO before the Formal Submission of the Rule Change Proposal

7 August 2013 MAC meeting

The IMO presented a Concept Paper: Outage Planning Phase 2 – Outage Process Refinements (CP 2013 04) to the MAC, noting the following points:

- In mid-2012, the IMO circulated a list of outstanding recommendations from the 2011 Outage Planning Review to the MAC. This list had since been updated to include new issues raised by MAC members, the IMO and System Management. Some of the issues in the list had been addressed through other Rule Change Proposals.
- Generally the package of work in CP_2013_04 contained technical changes to streamline the outage planning process and clarification of the obligations of Rule Participants around outage planning.

Ms Jenny Laidlaw outlined the major issues addressed in the Concept Paper. The following points were discussed:

- Mrs Jacinda Papps questioned whether the IMO had considered a longer time span for Opportunistic Maintenance, such as 36 hours. Ms Laidlaw replied that the IMO had not considered a longer period, as to date it had not been presented with a good reason for such a change.
- Mr Andrew Stevens suggested it should be possible to request an outage of any length at any time, provided that sufficient margin was available. Ms Laidlaw noted that the IMO disagreed with this concept, as it would reduce the forward planning and transparency of outages, and would make it easier for Market Participants to use Planned Outages to avoid capacity refunds.
- Mr Phil Kelloway agreed that the proposal to make capacity unavailable in the BMO before requesting an outage is good; but noted some potential complexities. In particular, he considered that it would be necessary for System Management to make sure that the BMO reflected a request for an outage, which currently it is not required to do. The Chair proposed that the obligation should be placed on the Market Participant to ensure that capacity is unavailable in the BMO before requesting an outage, rather than being on System Management to ensure that the availability matched.
- Mr Kelloway questioned how long System Management would have to assess a late
 Opportunistic Maintenance request. Ms Laidlaw confirmed that the intention was to
 retain the current arrangements for approval, which provide System Management with
 the ability to reject a request if it has insufficient time to adequately consider it.
- Mrs Papps questioned whether Verve Energy would be required to request Opportunistic
 Maintenance four and a half hours before gate closure. Ms Laidlaw agreed that this
 could be the case if the time limit for Opportunistic Maintenance requests was linked to
 gate closure times; but committed to working through the three request deadline options
 presented in the Concept Paper to confirm that they worked appropriately for
 Verve Energy Facilities.
- Ms Laidlaw asked members to provide their views to the IMO on the appropriate
 deadline for Opportunistic Maintenance requests, and noted that there was a trade-off
 between flexibility for generators to request Opportunistic Maintenance and transparency
 of information for others to respond based on the BMO.



- Mr Stevens suggested that the Concept Paper only indicated that Market Participants
 had asked for an ex post conversion from a Forced Outage to a Planned Outage, rather
 than the ability to apply, while on a Forced Outage, to have a Planned Outage after a
 certain timeframe. Ms Laidlaw confirmed that both options had been requested by
 Market Participants. The Chair added that the proposed framework will allow for the
 latter option.
- Mr Andrew Sutherland questioned what limit was proposed for an extension of an outage. The Chair confirmed that initially no time limit would be imposed.
- Mr Sutherland sought to clarify how the extension of an outage would work given that
 Market Participants are required to submit a request two days in advance. Mr Stevens
 discussed the benefits of reducing the incentive to overstate the length of an outage.
 Ms Laidlaw agreed to review the interaction of Opportunistic Maintenance and outage
 extensions, and proposed to discuss further the practicalities with Mr Sutherland.
- Dr Paul Troughton supported the IMO's approach to the treatment of Demand Side Programmes. He noted that moving to a dynamic baseline in the future may raise the requirement to log outages. The Chair suggested that real-time telemetry for Demand Side Programmes will provide the data required to assess the situation further.
 Ms Laidlaw confirmed that Demand Side Programmes would not be included on the Equipment List and therefore would not need to follow the outage planning process.
- Mr Shane Duryea questioned what problem the IMO was trying to address with the addition of distribution network equipment to the Equipment List. Ms Laidlaw noted that the intent was to provide visibility of network outages for distribution-connected generators. Mr Kelloway also noted that the IMO may wish to review the discretion that System Management currently has in relation to the inclusion of equipment on the Equipment List. He noted that the rules allow but do not require System Management to require the Network Operator to coordinate the timing of an outage with the affected generator.
- Ms Laidlaw sought feedback on the need for proactive reporting of Forced Outages by the Network Operator for both distribution-connected generators that are on the Equipment List and those that are not. Mr Duryea noted that Planned Outages are more problematic because of their nature. Ms Laidlaw noted that if only very short notice is available for a Planned Outage then perhaps it is not a Planned Outage.
- Mrs Papps questioned how the approval process would work for Consequential Outages
 that were requested before their start time. Mr Kelloway replied that he agreed it should
 be possible to gain approval of a Consequential Outage in advance, but would need to
 check the details with his team.

Ms Laidlaw noted the IMO's intention to present a Pre-Rule Change Proposal to the October 2013 MAC meeting and invited further comment from members in the interim.

Consultation between the 7 August 2013 and 11 December 2013 MAC meetings Following the 7 August 2013 MAC meeting the IMO:

- consulted with Verve Energy on how the proposed changes to the Opportunistic Maintenance process could work appropriately with Verve Energy's different bidding timeframes;
- consulted with ERM Power regarding the possibility of allowing short extensions to Scheduled Outages;



- on 29 August 2013, requested the views of MAC members regarding the appropriate deadlines for Opportunistic Maintenance requests and approvals, and the extent to which a Network Operator should be required to proactively report Forced Outages of its distribution system (the IMO received no responses to this request);
- undertook further consultation with System Management on the timing of approvals for Planned Outages; and
- undertook further consultation with System Management and Western Power on the
 obligations on a Network Operator to notify affected participants about outages, agreeing
 that Network Operators should follow the normal outage processes for any network
 equipment on the Equipment List and noting that Network Operators already have
 obligations to notify affected participants of Planned Outages.

11 December 2013 MAC meeting

The IMO presented a Pre-Rule Change Proposal: Outage Planning Phase 2 – Outage Process Refinements (PRC_2013_15) and provided an update to MAC members on the changes made by the IMO since the Concept Paper CP_2013_04 was presented at the 7 August 2013 meeting.

The following key points were discussed.

- Mr Brendan Clarke noted the proposal stated that Demand Side Programmes would no longer be required to log Forced Outages, and queried whether this meant that Demand Side Programmes would not be liable for Capacity Cost Refunds. Ms Laidlaw responded that it was already the case that Demand Side Programmes do not log Forced Outages. Demand Side Programmes would continue to incur Capacity Cost Refunds if they either failed to secure sufficient Associated Loads to meet their Relevant Demand requirement or else failed to reduce their consumption sufficiently in response to a Dispatch Instruction.
- Mr Stevens noted that the current deadline for requesting approval of a Scheduled
 Outage in the System Management Market Information Technology System (SMMITS) is
 10:00 AM on the day before the Scheduling Day. Mr Stevens suggested that this time
 should be retained and not changed to 8:00 AM as suggested in the proposal.
 Ms Laidlaw responded that if Market Participants preferred the 10:00 AM deadline and
 this time was already used in SMMITS then the IMO would amend the proposal to use
 this time instead of 8:00 AM.
- Mr Sutherland queried why the IMO had proposed not to allow Market Participants to request a series of consecutive Opportunistic Maintenance outages. Ms Laidlaw responded that the rationale was to encourage Market Participants to plan their outages and to provide maximum transparency to the market of an upcoming Planned Outage.
- Mr Sutherland suggested that if during the course of an Opportunistic Maintenance outage it was realised that a slightly longer than 24 hour Opportunistic Maintenance outage would be beneficial, the IMO's proposal to restrict Opportunistic Maintenance outages to 24 hours would mean that the relevant Market Participant would be required to return the Facility to service and then undertake another outage if it wished to complete the work. Ms Laidlaw responded that as Planned Outages were for discretionary maintenance, it should be possible (and would be more appropriate) for the Market Participant to apply for a Scheduled Outage in the scenario described. Mr Sutherland responded that if something happened to a Facility on a Friday, it may be better for work to be done on that Facility over the weekend rather than delay the work



- until a Scheduled Outage can begin on the following Monday or Tuesday. Ms Laidlaw suggested that if the outage was truly discretionary then it should be able to be delayed until the following weekend.
- Mr Stevens considered that if System Management has enough time to assess an outage request and can accommodate the outage, then that outage should be allowed. The Chair responded that if consecutive Opportunistic Maintenance outages were allowed this would reduce the incentive for Market Participants to plan their outages. Mr Sutherland disagreed, suggesting that there are sufficient commercial incentives on Market Participants to ensure that they plan their outages. Mr Sutherland also suggested that the proposed rules were arbitrary. The Chair reiterated that the proposed rules would provide an incentive for Market Participants to plan outages and would also provide transparency and notice to the market of events that could affect prices.
- Mr Dean Sharafi warned that Market Participants should not assume that an Opportunistic Maintenance outage request will be approved.
- Ms Laidlaw observed that to date no good reason had been presented as to why Opportunistic Maintenance outages should be longer than 24 hours. Mr Stevens suggested 48 hours might be an appropriate time limit for Opportunistic Maintenance outages as it would allow a pre-accepted Planned Outage to back directly on to an Opportunistic Maintenance outage. Ms Laidlaw noted that this would be equivalent to removing the concept of Opportunistic Maintenance and simply reducing the lead time required for a Scheduled Outage.
- The Chair sought and received the support of MAC members for the progression of the proposal into the formal rule change process.

Further details of the 7 August 2013 and 11 December 2013 MAC meetings are available in the MAC meeting papers and minutes available on the Rule Change Panel's website at https://www.erawa.com.au/rule-change-panel/market-advisory-committee-meetings.

5.3 Consultation during the First Submission Period

On 12 February 2014, Alinta Energy (**Alinta**), Bluewaters Power (**Bluewaters**), ERM Power and Synergy met with the IMO to discuss several issues, including the IMO's proposed amendments in this Rule Change Proposal. During the meeting the Market Participants proposed an alternative outage planning mechanism, which was then further detailed in each of those Market Participant's first period submissions, albeit slightly differently in each.

The meeting was held on an informal basis and minutes of the discussion are not available to the Rule Change Panel for assessment.

5.4 Submissions Received during the First Submission Period

The first submission period for this Rule Change Proposal was held between 27 December 2013 and 4 March 2014. The IMO received submissions from Alinta, Community Electricity, ERM Power, Synergy, System Management and Western Power during the first submission period; and also received out of session submissions from



Bluewaters and Perth Energy. Additionally, the Rule Change Panel received an out of session submission on 14 January 2019 from Collgar Wind Farm (**Collgar**).¹¹

Alinta, in its 11 January 2019 submission to the CFFS, advised that this submission superseded the submission provided to the IMO by Alinta during the first submission period. The Rule Change Panel has therefore excluded Alinta's earlier submission from its assessment of this Rule Change Proposal.

Community Electricity supported all aspects of the Rule Change Proposal, considering that the proposed amendments are incremental in nature, and clarify and rationalise the Market Rules without materially impacting their intent.

Perth Energy also supported the proposed amendments, and suggested further amendments in relation to Issue 1 (Equipment List: Demand Side Programmes and Associated Loads, Dispatchable Loads and Interruptible Loads) to implement a less formal process to inform System Management about maintenance and other significant activities at major loads.

Collgar explicitly supported the IMO's solutions for Issue 4 (Balancing Submission unavailability deadlines), Issue 5 (Deadline for approval of a Planned Outage), Issue 9 (Prohibition on Opportunistic Maintenance Outages spanning two Trading Days) and, in relation to outage extension requests, Issue 13 (Availability declarations for Planned Outage approval requests). However, Collgar:

- in relation to Issue 4, raised a question about how Non-Scheduled Generators should estimate their MW output for a Trading Interval for inclusion in Balancing Price-Quantity Pairs in Balancing Submissions; and
- in relation to Issue 13, suggested that a participant should be able to verbally notify
 System Management to enable the extension of an existing approved Planned Outage.

Collgar disagreed with the IMO's proposal for Issue 6 to require IPP capacity that is subject to an outstanding Opportunistic Maintenance request to be declared as unavailable in the IPP's Balancing Submissions. Collgar considered that the proposed requirement was unnecessary (because System Management was already aware of the potential unavailability of the Facility from the outage request) and unduly onerous on the IPP.

Collgar also:

- suggested that the term 'as soon as practicable' (in the context of a Market Generator notifying System Management of a Forced Outage or Consequential Outage under proposed clause 7A.2A.1) should be defined in the Market Rules;
- raised general concerns that the current outage planning, management and lodgement process is too complicated; and
- raised several other issues around Forced Outages and Consequential Outages that fall outside the scope of this Rule Change Proposal.

Bluewaters Power considered that the proposed outage planning arrangements were an improvement on the current arrangements but could be improved further in some areas. Bluewaters:

suggested that a revised definition of 'Forced Outage' was central to this Rule Change
Proposal, and as another Rule Change Proposal under development by the IMO
(Outages and the Application of Availability and Constraint Payments to Non-Scheduled)

While Collgar's submission was received just after the close of the further submission period, the Rule Change Panel decided to consider it as a late submission on the Rule Change Proposal as it addresses the original issues raised in the Rule Change Proposal rather than the questions raised in the call for further submissions.



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- Generators (PRC_2013_16)) was expected to provide such a definition, the progression of the two Rule Change Proposals should be coordinated;
- used an analogy of a taxi requiring a tyre change to argue that identifying an issue in advance that needs attention, and identifying the time frame it should be addressed in, should not by default define that task as a Forced Outage;
- noted its perception that the IMO was prioritising the deterrence of Market Participants from hiding Forced Outages ahead of incentivising the best economic outcomes of outage planning and maintenance activities;
- considered that the incentives to avoid excessive Planned Outages in the Rule Change Proposal: Incentives to Improve Availability of Scheduled Generators (RC_2013_09)¹², combined with the technical criteria for approval of an outage request, provide adequate protection to the market from Market Participants hiding a material level of Forced Outage under the guise of a Planned Outage;
- proposed changes to the Opportunistic Maintenance rules to:
 - allow a Market Participant to submit a request for approval of an 'Opportunistic Outage' at any time between 6:00 AM and 6:00 PM each day;
 - set the deadline for decisions on Opportunistic Outage requests to 1 hour before the outage is due to begin;
 - require the outage period to begin at least 6 hours after the time the request is submitted, and allow it to continue until the time when a 'pre-accepted Planned Outage'¹³ could, if approved, begin (i.e. a maximum period of around 44 hours);
 - potentially require the issue of a Dispatch Advisory when an Opportunistic Outage request is approved; and
 - potentially place a limit on the number of Opportunistic Outage equivalent days that a Market Participant could take (e.g. 8 per year, or 20 per 1000 days);
- in relation to Issue 2 (Equipment List: Network Equipment), suggested that network equipment should not be required on the Equipment List, even if an outage of that equipment can affect a generator on the Equipment List;
- supported the IMO's proposed solutions for Issues 1 (Equipment List: Demand Side Programmes and Associated Loads, Dispatchable Loads and Interruptible Loads), 3 (Requirements to follow the outage planning process), 6 (Clarification of requirements for Balancing Facilities (excluding the Balancing Portfolio)), 7 (Clarification of requirements for the Balancing Portfolio), 12 (Notification timelines for Small Outage Facilities) and 13 (Availability declarations for Planned Outage approval requests);
- proposed removal of the requirement for Opportunistic Maintenance to be for 'minor'
 maintenance only, on the basis that its proposed Opportunistic Outage rules would allow
 the commencement of a larger piece of work under an Opportunistic Outage; and

A 'pre-accepted Planned Outage' was a Scheduled Outage for which the initial submission and acceptance steps were managed verbally rather than through SMMITS. During a meeting of the AEMO Procedure Change Working Group on 26 June 2018, AEMO advised stakeholders of its decision to discontinue the pre-accepted Planned Outage process because it had identified that the process did not fully comply with the Market Rules. References to pre-accepted Planned Outages were removed from the PSOP: Facility Outages on 7 January 2019.



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RC_2013_09 was rejected by the Minister for Energy on 19 May 2014. However, most of the proposed amendments were later implemented by the Minister through the Amending Rules in Schedule B, Part 1 of the Wholesale Electricity Market Rules Amending Rules 2016, published in Gazette 2016/89.

- proposed amendments to clause 3.19.3A to allow System Management, where it did not have time to assess a request for approval of Opportunistic Maintenance, to:
 - take the additional time needed to assess the request;
 - add this additional time to the start and end times of the proposed outage period;
 and
 - offer the revised outage to the requesting Market Participant, who could choose whether to take up the revised outage being offered.

ERM Power's submission was limited to two specific matters:

- in relation to Issue 6, ERM Power considered that, to the extent a Balancing Facility returns to service prior to the end of a Planned Outage, its capacity should be allowed to return to the BMO as available; and
- in relation to Issues 9 and 11, while acknowledging that this Rule Change Proposal improves the current outage planning timing, ERM Power agreed with Bluewaters that Opportunistic Maintenance outages should be allowed to exceed 24 hours and continue until the start of a pre-accepted Planned Outage.

Synergy expressed support for any proposal that aims to reduce complexity and increase flexibility in a process. However, Synergy suggested that this Rule Change Proposal could be further developed to fully realise the benefits of a more flexible and simple outage planning process. Synergy:

- described its asset management approach, which involves a combination of proactive and reactive maintenance;
- considered that addressing emergent plant issues as soon as possible leads to the most economically efficient and reliable outcomes for the market;
- considered that other incentives exist for Market Generators to request Planned Outages early; to not apply for too many Planned Outages; and to return to service from their Planned Outages as soon as possible;
- proposed that consideration be given to removing all time constraints with respect to applying for Opportunistic Maintenance, and that the consideration should only be system security and availability:
- reiterated the suggestions for Opportunistic Maintenance changes made by Market Participants during their 12 February 2014 meeting with the IMO, including:
 - allowing any planned preventative and/or corrective maintenance to be considered a Planned Outage, provided it was approved by System Management;
 - replacing the current on-the-day and day-ahead Opportunistic Maintenance outage types with a single outage type; and
 - allowing, if sufficient reserve margin exists, Opportunistic Maintenance to take effect immediately (or with an appropriate lead time to signal an outage to the market) until the point a pre-accepted Planned Outage could (if approved) begin; and
- considered that any amendments to the definition of an outage should be progressed as part of this Rule Change Proposal, rather than separately through PRC 2013 16.



System Management supported the Rule Change Proposal and suggested the following additional changes:

- amendment of proposed clause 7A.2.9 to require Synergy to update its Balancing Submissions as soon as it is aware of any outages (including Forced Outages) that reduce the available capacity of the Balancing Portfolio;
- amendment of proposed clause 3.18.2(b) to require System Management to review and update the Equipment List not from time to time, as proposed, but whenever Facilities or items of equipment need to be added, updated or removed from the Equipment List; and
- amendment of clause 7.13.1D (which specified what real-time outage information System Management was required to provide to the IMO for publication on the Market Web Site) to extend the information requirements to cover all Outages, not just those of Scheduled Generators and Non-Scheduled Generators.

Western Power considered that any generation system with a nameplate capacity of less than 10 MW should not be included on the Equipment List, noting that its particular concern was in relation to generation systems connected to shared distribution networks. Western Power advised that the inclusion of distribution system equipment (that could limit the output of a generation system) on the Equipment List would present some challenges for the Network Operator to manage in the future; and questioned whether the change would materially benefit the market and Western Power.

However, Western Power did support the IMO's proposals to:

- restrict the Facilities that must be included on the Equipment List under clause 3.18.2(c)(ii) to Scheduled Generators and Non-Scheduled Generators holding Capacity Credits with a nameplate capacity of at least 10 MW (Issue 1);
- clarify the timing for Scheduled Outage approvals under clause 3.19.1 (Issue 8); and
- amend clause 3.18.7 to replace "relevant Facility or item of equipment" with "Equipment List Facility", which Western Power considered clarifies the Network Operator's obligations regarding Outage Plans that will impact on Facilities on the Equipment List.

The assessment by submitting parties as to whether the Rule Change Proposal would better achieve the Wholesale Market Objectives is summarised below.

Submitter	Wholesale Market Objective Assessment
Bluewaters	Bluewaters believed the proposed changes are an improvement on the current rules and will better facilitate achieving the Wholesale Market Objectives; but believed there are additional opportunities (as outlined in the comments in its submission) within the Rule Change Proposal to more effectively achieve the Wholesale Market Objectives.
Collgar	No specific assessment provided.
Community Electricity	Community Electricity considered that all aspects of the proposed changes are consistent with all the Wholesale Market Objectives and Wholesale Market Objectives (a) and (d) are especially promoted.



Submitter	Wholesale Market Objective Assessment
ERM Power	No specific assessment provided of the proposed amendments. However, ERM Power considered that eliminating the gap between Opportunistic Maintenance and Scheduled Outages would better achieve Wholesale Market Objective (a).
Perth Energy	Perth Energy considered that in aggregate the amendments are likely to improve efficiency in the outage planning process and lower long-term costs associated with outages, which would positively impact Wholesale Market Objectives (a) and (d).
Synergy	No specific assessment provided.
System Management	System Management considered the proposed amendments would better address the Wholesale Market Objectives.
Western Power	No specific assessment provided.

Copies of all submissions on the Rule Change Proposal received during and after the first submission period are available on the Rule Change Panel's website.

5.5 The Rule Change Panel's Response to Submissions Received during the First Submission Period

The Rule Change Panel's response to each of the specific issues raised in the first submission period is presented in Appendix B of this report. A more general discussion of the proposal, which addresses the main issues raised in submissions and the Rule Change Panel's response to these issues, is available in section 6.3 of this report.

5.6 MAC Consultation by the Rule Change Panel after the First Submission Period

On several occasions the IMO extended the publication date for the Draft Rule Change Report to allow the IMO to consider the outcomes of the Electricity Market Review (**EMR**) and any potential impacts on the Rule Change Proposal.

In May 2015, the Minister asked the IMO to exercise its discretion under clause 2.5.10 of the Market Rules to extend the normal timeframes for processing all Rule Change Proposals in progress (except for those relating to the deferral of Reserve Capacity Cycles) until the new rule change approval body was established as part of the EMR reforms.

The rule making functions of the IMO were transferred to the Rule Change Panel on 26 November 2016. The Rule Change Panel commenced its rule making functions on 3 April 2017.

The Rule Change Panel further extended the timeframe for the publication of the Draft Rule Change Report in extension notices published on 10 April 2017 and 21 December 2017. The purpose of the extensions was to allow the Rule Change Panel enough time to assess the Draft Rule Change Report against the recent changes to the Market Rules, while managing competing priorities of other Rule Change Proposals.

During July-August 2017 the Rule Change Panel, in consultation with the MAC, assigned urgency ratings to the open Rule Change Proposals in accordance with its new Rule Change



Proposal Prioritisation and Scheduling Framework. There was general agreement that the Rule Change Panel was, at the time, unable to assess this Rule Change Proposal due to uncertainty about the scope of the EMR.

8 November 2017 MAC meeting

During a review of candidate issues for inclusion on the MAC Market Rules Issues List, the MAC agreed to place Bluewaters' candidate Issue 15 (Changes to the rules for approving Planned Outage Extensions) on hold pending the progression of this Rule Change Proposal, which includes amendments related to the issue.

Mr Matthew Martin noted that the scope of the Minister's energy market reforms was not expected to include material changes to the WEM outage provisions, and so should not prevent the progression of this Rule Change Proposal by the Rule Change Panel on a business-as-usual basis.

Ms Laidlaw noted the Rule Change Panel had not yet assigned an urgency rating to the Rule Change Proposal, due to uncertainties about its interdependencies with the Minister's reform program. MAC members and observers were requested to email their suggested urgency ratings for the Rule Change Proposal to RCP Support by 15 November 2017.

The MAC agreed to delete ERM Power's candidate Issue 34 (Applications to extend Planned Outages) as it was covered by Issue 15.

Urgency rating feedback received from MAC members and observers

In the feedback received before the 15 November 2017 deadline, two submitters suggested a High urgency rating, one suggested a Medium urgency rating, one considered the urgency rating was still unclear, and two provided no view.

The Rule Change Panel agreed to assign a Medium urgency rating to this Rule Change Proposal at its 16 November 2017 meeting.

RCP Support received three further emails after the 16 November 2017 Rule Change Panel meeting. One suggested a Medium urgency rating, one suggested a Low urgency rating, and the third provided no specific rating but suggested that the Rule Change Proposal should be progressed as soon as feasible.

13 June 2018 MAC meeting

The Chair led a discussion about the order of business for progressing the open Rule Change Proposals and a request from Perth Energy that the urgency rating of the Rule Change Proposal: Implementation of 30-Minute Balancing Gate Closure (RC_2017_02) be increased from Medium to High.

After some discussion, the MAC agreed that the Rule Change Proposal: Administrative Improvements to the Outage Process (RC_2014_03) and this Rule Change Proposal (RC_2013_15) should be assigned the next highest priority after Removal of Resource Plans and Dispatchable Loads (RC_2014_06), subject to clarification of the interactions with the WEM Reform Program; and that RC_2017_02 should retain its current Medium urgency rating.

8 August 2018 MAC meeting

Ms Laidlaw and Mr Clayton James gave a presentation to the MAC on the work being undertaken by RCP Support and AEMO to determine what components of this Rule Change



Proposal and RC_2014_03 can be progressed without conflict with AEMO's System Management System Transfer (**SMST**) project and the WEM Reform Program.

The following points were discussed.

- Mr Patrick Peake considered the terms 'outage' and 'de-rating' needed to be defined in the Market Rules. Mr Peake noted that Perth Energy had been asked to report full Forced Outages in situations where it was late to start up its generating unit. Mr Peake considered that a full Forced Outage should not be required in these cases.
- In response to a question from Ms Wendy Ng, Mr James clarified that the WEM Reform Program's proposed review of outage definitions applied to both current and future market arrangements. AEMO's intention was to consider what was needed to support a constrained network access environment in Tranche 1 of the WEM Reform Program, and then bring forward any parts that can be implemented before 2022. Ms Ng suggested that the definition of a Consequential Outage might change with the implementation of constrained network access.
- Mrs Papps suggested that an Opportunistic Maintenance request spanning two Trading Days could be recorded in SMMITS as two separate requests, if this made implementation of the changes easier. Ms Laidlaw advised that AEMO would be looking at how the validation of Opportunistic Maintenance requests worked in SMMITS, to help determine how and whether the proposed changes to Opportunistic Maintenance in RC_2013_15 can be progressed.
- Ms Ng asked whether any further workshops were planned in respect of the two
 proposals. Ms Laidlaw replied that RCP Support was planning to hold a workshop for
 RC_2013_15 either before or after a CFFS. There was general support for holding the
 workshop before the CFFS and as soon as practicable.

12 September 2018 MAC meeting

Ms Laidlaw noted that AEMO was yet to advise when it could make resources available to consider the IT implementation options for RC_2014_03. AEMO had however contacted Western Power about exploring options to do minor work on SMMITS to support the implementation of this Rule Change Proposal (RC_2013_15) before the transfer of SMMITS to AEMO as part of the SMST project.

RCP Support intended to prioritise development of a CFFS, in the expectation that this would allow AEMO sufficient time to undertake the investigation of IT options for RC_2014_03.

Further details of the 8 November 2017, 13 June 2018, 8 August 2018 and 12 September 2018 MAC meetings are available in the MAC meeting papers and minutes available on the Rule Change Panel's website at https://www.erawa.com.au/rule-change-panel/market-advisory-committee-meetings.

5.7 MAC Workshops

RCP Support held MAC workshops for this Rule Change Proposal on 17 September 2018 and 7 November 2018. A summary of the workshops is provided below. Further details, including workshop discussion notes and minutes, are available on the Rule Change Panel's website.



17 September 2018 MAC workshop

The aims of the 17 September 2018 workshop were to:

- review changes affecting the Rule Change Proposal since its submission in 2013;
- seek stakeholder input on potential problems and refinements;
- provide an opportunity for stakeholders to raise new questions or concerns; and
- provide input to the development of a CFFS.

Attendees raised no concerns about the amendments proposed in this Rule Change Proposal to address:

- Issue 1 (Equipment List: Demand Side Programmes and Associated Loads, Dispatchable Loads and Interruptible Loads);
- Issue 3 (Requirements to follow the outage planning process);
- Issue 7 (Clarification of requirements for the Balancing Portfolio);
- Issue 8 (Clarification of deadline for Scheduled Outage approval requests);
- Issue 9 (Prohibition on Opportunistic Maintenance requests spanning two Trading Days);
 and
- Issue 12 (Notification timelines for Small Outage Facilities).

In relation to Issue 2 (Equipment List: Network equipment):

- Mr Dean Frost noted that Western Power would like to discuss options to implement sustainably efficient processes and systems to provide the required information to AEMO, given the likely future increase in distribution-connected facilities. Mr James noted that the proposed change was very broad and should allow AEMO and Western Power to define the most appropriate process to capture the required information.
- Mr Frost indicated that capturing the information would come at a cost for Western
 Power and take time to implement. Ms Laidlaw noted that in discussions with the IMO in
 2013-14, Western Power had agreed that the changes could be implemented quickly
 and inexpensively using existing systems for the current small number of
 distribution-connected generators.
- Attendees agreed that Western Power, AEMO and RCP Support should discuss these issues outside of the workshop.

In relation to Issue 4 (Balancing Submission unavailability declarations), attendees agreed that unavailable capacity details were not required in Balancing Submissions for Non-Scheduled Generators and the proposed introduction of such a requirement in this Rule Change Proposal should be rejected.

In relation to Issue 5 (Deadline for approval of a Planned Outage):

• Attendees raised no concerns about the proposed deadline for approving Opportunistic Maintenance (30 minutes before Balancing Gate Closure for the Trading Interval in which the outage is due to commence), or the proposal to deem a request for Opportunistic Maintenance to be rejected if System Management has not made a decision on the request by the approval deadline. Attendees agreed that the Market Rules should not specify a different deadline for requesting Opportunistic Maintenance.



 However, attendees agreed that the proposed approval deadline would not leave Market Generators enough time to make the necessary arrangements for commencing a Scheduled Outage. Attendees agreed that 2:00 PM on TD-2 was an appropriate deadline for System Management to approve Scheduled Outages.

In relation to Issue 6 (Clarification of requirements for Balancing Facilities (excluding the Balancing Portfolio)):

- There was some discussion about the proposed requirements for reporting capacity that
 is subject to Planned Outage requests in Balancing Submissions, and about how
 clause 3.19.2(b)(ii) has been interpreted since the implementation of the Balancing
 Market.
- Attendees raised no concerns about the requirements in proposed clause 7A.2A.1 for the logging of a Forced or Consequential Outage for capacity declared unavailable in a Balancing Submission.
- There was some discussion about whether a Market Generator should be obliged to request or report an Outage if it is not undertaking maintenance on its Scheduled Generator but does not wish to offer some or all of the Facility's capacity that is not associated with Capacity Credits into the Balancing Market.
 - Mr James indicated that AEMO used information about the availability of capacity that is not subject to Capacity Credits in its system planning functions. There was some discussion about whether AEMO should take the availability of generator capacity that is not subject to Reserve Capacity Obligations into account in determining reserve margins and making decisions on Planned Outage approvals. Attendees agreed that RCP Support and AEMO should discuss this issue further outside the workshop, and that the issue should be raised in the CFFS.
- There was discussion about whether Planned Outages should include start-up times to cover the complete time until a Facility could be synchronised.
- Attendees agreed that if System Management rejects or recalls a generator Planned
 Outage, it should be able to direct the Market Generator to return the relevant capacity
 to the Balancing Market as soon as practicable, even if this is after Balancing Gate
 Closure. If this occurs, then attendees agreed that the Market Generator should not be
 required to provide any subsequent notification to System Management to explain the
 late Balancing Submission.

In relation to Issue 10 (Restrictions on the timeframes for making Opportunistic Maintenance requests), attendees raised no concerns about the proposed amendments, but discussed whether any further prescription or guidance should be included in the Market Rules around the practical application of clause 3.19.4, which requires System Management to approve or reject a Planned Outage request and inform the relevant participant as soon as practicable. Mr Matthew Fairclough and Mr James noted that AEMO intended to continue to include additional deadlines for the approval or rejection of Opportunistic Maintenance requests that are submitted within particular timeframes in the PSOP: Facility Outages.

Attendees agreed that more specific deadlines should not be included in the Market Rules, but offered several other suggestions, including an extension of the heads of power for the PSOP to include a requirement for additional detail about the application of clause 3.19.4. Attendees agreed that this guestion should be included in the CFFS.

Participants raised no concerns about the proposed amendments to address Issue 11 (Restrictions on the timeframes for making consecutive Opportunistic Maintenance



requests). However, Mr Fairclough suggested that the obligation should be on the Rule Participant not to submit Opportunistic Maintenance requests that are less than 24 hours apart, rather than on AEMO to reject such requests.

In relation to Issue 13 (Availability declarations for Planned Outage approval requests), attendees agreed that another workshop should be held to consider options for the provisions relating to availability declarations by comparing their outcomes for a range of outage planning scenarios.

Mr Fairclough noted a potential drafting inconsistency between proposed clause 3.19.1 (which requires a Market Participant or Network Operator to request approval of a Scheduled Outage) and proposed clause 3.19.2B (which prohibits such requests if the capacity would not be otherwise available). Ms Laidlaw agreed that clause 3.19.1 may need to be made subject to clause 3.19.2B.

Attendees also:

- agreed that Scheduled Generators with a nameplate capacity of less than 10 MW should have to be on the Equipment List if they hold Capacity Credits;
- supported additional changes to introduce a materiality threshold for the requirement to log Outages for Non-Scheduled Generators; although Mr James noted that the appropriate threshold might vary depending on the technology of the Facility, so it might be useful to allow some flexibility in the threshold definition, e.g. by locating the definition in a PSOP; and
- agreed that an additional change should be included in this Rule Change Proposal to clarify that Market Participants are allowed to undertake Commissioning Tests during a Planned Outage.

7 November 2018 MAC workshop

The aim of the 7 November 2018 workshop was to consider options for provisions relating to availability declarations by comparing their outcomes for a range of outage planning scenarios.

The following points were discussed.

Slides 4-5¹⁴: Outage planning objectives and assessment factors:

 Attendees raised no concerns about the outage planning objectives and Rule Change Proposal assessment factors listed in slides 4 and 5 of the workshop discussion notes.¹⁵

Slides 6-8: Workshop terminology:

- Ms Laidlaw noted that the definition of 'available for dispatch' required further consideration, as it was possible that capacity that was not assigned Capacity Credits would be allowed to be declared as unavailable in a Balancing Submission without being on an Outage. In response to a question from Ms Ng, Ms Laidlaw and Ms Laura Koziol clarified that the question of whether capacity without Capacity Credits should be allowed to be bid as unavailable in Balancing Submissions without being on an Outage would be part of the CFFS.
- Mr Paul Arias noted that currently, if a Facility is undertaking a Commissioning Test, the total capacity of that Facility is affected by the Commissioning Test, because there is no

These objectives and assessment factors are discussed in section 6.2.1 of this report.



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¹⁴ The slide number references relate to the workshop discussion notes, which are available on the Rule Change Panel's website.

option for it to apply to only part of the capacity. Ms Laidlaw agreed to consider the issue as part of the assessment of the Rule Change Proposal.

Slides 9-11: Issue 13 proposed changes:

- Attendees reviewed the amendments proposed by the IMO to address Issue 13 (Availability declarations for Planned Outage approval requests).
- Mr Adam Stephen sought clarification about how Scheduled Outages that were approved with conditions would be treated if any of their Outage Plan details changed.
 Ms Laidlaw replied that the Market Rules did not provide for a Scheduled Outage to be approved with conditions. There was some discussion about the concept of accepting and approving Planned Outages with conditions.
- Ms Laidlaw clarified that the broader criteria for acceptance and approval of Planned Outages were out of the scope of this Rule Change Proposal.

Slide 12-14: Issues affecting the original Rule Change Proposal:

- Attendees agreed that:
 - AEMO's interpretation of the term 'removal from service' leads to outcomes that conflict with the intent of the Rule Change Proposal;
 - there should be an explicit requirement in the Market Rules for participants to update an Outage Plan if any of the relevant details changed; and
 - clarification is needed on which changes to an Outage Plan should cause it to be considered a new Outage Plan that needs to be reassessed and re-prioritised.
- Attendees generally supported the additional changes to address the three issues that were listed on slide 14 of the workshop discussion notes.
- Ms Ng suggested that a participant should be able to shift the timing of a Planned Outage without it losing its priority, if the change was not significant. Mr Leon Kwek replied that if a shift in the timing of a Scheduled Outage led to a conflict with another Scheduled Outage, then the modified Scheduled Outage should have the lower priority. Mr Arias noted that this approach could lead to participants requesting longer Scheduled Outages than they needed, to avoid running out of time. Mr Kwek considered this would still be the preferred outcome.
- Attendees did not identify any additional changes to an outage request that should cause the request to be treated as a new outage request.

Slide 17: Availability declaration requirement¹⁶ – straw man:

- Attendees discussed a proposal to change the availability declaration requirement so
 that a participant must not request a Planned Outage if it is aware that the capacity
 would not otherwise be available.
- Mr Arias noted that in some cases a Facility needs a Planned Outage to fix a problem, but the Facility can be operated in a way that allows it to be dispatched despite that problem, e.g. a Facility is losing water due to a leak that needs an Outage to repair, but the Facility can still be operated if water is trucked in. Ms Laidlaw noted that as long as the relevant capacity could be dispatched and made available in the Balancing Market,

In this report, the 'availability requirement' for a proposed Planned Outage (or an Outage Plan or request for Opportunistic Maintenance) is that if the proposed Planned Outage was not approved the relevant capacity or capability would be available for service for the duration of the proposed outage period; while the 'availability declaration requirement' refers to the nature of the implicit declaration made by a Rule Participant when it submits an outage request. The wording of the minutes for the 7 November 2018 workshop have been updated here to use this terminology.



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- the availability requirement would be fulfilled and the participant could request a Planned Outage.
- Mr Oscar Carlberg sought clarification on how the new proposed availability declaration requirement would apply to the extension of a Planned Outage. Ms Laidlaw replied that extension outages would be exempt from the availability requirement provided they did not follow an availability-challenged¹⁷ Planned Outage.
- Ms Ng noted that a Planned Outage to investigate a potential issue might identify a major problem that requires an extension to address. The original Planned Outage might fulfil the availability requirement and then the request for the extension outage should be exempt from the availability requirement. Ms Laidlaw clarified that there was likely to be a need for a good faith requirement that the period for which a Planned Outage is requested should not be unrealistically short given the information available to the participant about the work that needs to be undertaken.

Slide 18: Availability declaration requirement scenarios:

- Attendees reviewed a set of test scenarios for the availability declaration requirement straw man, and did not suggest any additional scenarios for consideration.
- Ms Ng raised a concern that the on-site staff who requested Planned Outages would be
 focussed on the maintenance of the Facility and may not necessarily take the availability
 requirement into account. Ms Laidlaw noted that the straw man availability declaration
 requirement provided a simpler test than the one proposed in the Rule Change
 Proposal.
- Attendees were generally supportive of the straw man availability declaration requirement and agreed it would be easier to apply than the one proposed in the Rule Change Proposal.

Slides 19-21: 'Lock-in' point for a Scheduled Outage – straw man:

- Attendees discussed a proposal to change the point of time after which an Outage Plan
 does not have to be withdrawn or rejected because it ceases to meet the availability
 requirement (lock-in point); and reviewed a set of test scenarios for the straw man
 proposal.
- In response to a question from Ms Teresa Smit, Ms Laidlaw clarified that if an availability-challenged Planned Outage was rejected for some other reason after it was accepted, then the participant would need to report a Forced Outage.
- Attendees supported the straw man proposal to change the lock-in point for a Scheduled
 Outage from the time of approval to the time of first acceptance and inclusion in System
 Management's outage schedule.

Slides 23-24: Starting Scheduled Outages early:

- Attendees agreed that an Opportunistic Maintenance outage should be allowed to precede a Scheduled Outage.
- Mr Arias asked whether the original intention of the Rule Change Proposal was to
 prevent Opportunistic Maintenance from directly preceding a Scheduled Outage.
 Ms Laidlaw clarified that under the Rule Change Proposal drafting, the approval of the
 Opportunistic Maintenance request could be interpreted as causing the Scheduled

^{&#}x27;Availability-challenged' is a term used in the 7 November 2018 MAC workshop to describe a Planned Outage or proposed Planned Outage that AEMO is aware does not meet the availability requirement.



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Outage to become availability-challenged. Attendees agreed that the proposed Amending Rules should be clarified to avoid this interpretation.

Slides 26-29: Disingenuous Planned Outage requests – straw man:

- Attendees discussed a straw man proposal for additional changes to address concerns about the potential for disingenuous Planned Outage requests; and reviewed a set of test scenarios for the straw man.
- Mr Stephen sought clarification on what form of evidence would need to be provided to AEMO to show that capacity was capable of being made available for dispatch prior to the start of a Planned Outage. Mr Kwek replied that this could, for example, be a consultant's report.
- Mr Arias raised a concern that AEMO might be overly conservative in its assessment of
 evidence so that Planned Outages are never approved while a Facility is on a Forced
 Outage. Ms Ng agreed with Mr Arias, and noted that it was hard to assess whether the
 evidence could be delivered, as it was unclear what kind of evidence AEMO would
 require.
- Ms Laidlaw sought suggestions from attendees about how the requirements for evidence can be specified to provide more clarity. Attendees did not provide specific suggestions at the workshop, although Ms Smit suggested that a report from an external party may be required.
- Attendees agreed that the evidence requirements should be detailed in the PSOP: Facility Outages.
- Attendees raised no other concerns about the straw man proposal to address concerns about disingenuous Planned Outage requests.

Slide 30: Availability declaration requirements for non-generator Equipment List Facilities:

- There was general agreement that the proposed availability declaration requirements could also be applied to non-generator Equipment List Facilities such as items of network equipment, provided that a suitable alternative to the term 'available for dispatch' was used for these facilities.
- There was some discussion about what term would be appropriate for network equipment. Ms Kei Sukmadjaja noted that during AEMO's recent workshop on the PSOP: Facility Outages, Western Power proposed that an Outage Plan should be deemed to be valid if the relevant network equipment was capable of being energised. This suggestion had been incorporated into the draft PSOP for the Procedure Change Proposal AEPC_2018_04: Facility Outages.
- Ms Laidlaw considered the term 'capable of being energised' would not be suitable because an item of network equipment can be partially de-rated but still capable of being energised. Such de-ratings were subject to the normal outage scheduling and reporting requirements. Ms Laidlaw suggested that 'available for service' might be a suitable term for network equipment and sought feedback from Western Power and AEMO on this question.

Attendees agreed that a three-week submission period would be sufficient for the proposed CFFS.



5.8 Call for Further Submissions

On 11 December 2018, the Rule Change Panel published a CFFS on this Rule Change Proposal on the basis that:

- a significant period of time had passed since the IMO consulted on the Rule Change Proposal, during which the Market Rules had undergone numerous changes; and
- stakeholders should be given an opportunity to provide feedback on some additional issues identified by the Rule Change Panel that affect the Rule Change Proposal before the development of the Draft Rule Change Report.

While the Rule Change Panel sought submissions on all aspects of the Rule Change Proposal, it sought specific feedback on 19 questions. These questions, which are summarised in Appendix C and discussed in greater detail in sections 6.3 and 6.4 of this report, generally reflected the outcomes of the 17 September 2018 and 7 November 2018 MAC workshops.

The Rule Change Panel also further extended the publication date for the Draft Rule Change Report to 1 April 2019, to:

- allow for the CFFS; and
- allow the Rule Change Panel sufficient time to assess the Rule Change Proposal and the submissions received and prepare the Draft Rule Change Report.

The CFFS and extension notice are available on the Rule Change Panel's website.

5.9 Submissions Received During the Further Submission Period

The further submission period was held between 11 December 2018 and 11 January 2019. The Rule Change Panel received submissions in response to the CFFS (**further submissions**) from AEMO, Alinta, Bluewaters, Perth Energy and Synergy.

Submitters were generally supportive of the Rule Change Proposal and the additional changes suggested in the CFFS. However, each further submission included specific concerns and suggestions relating to different issues.

Copies of all further submissions received are available on the Rule Change Panel's website.

5.9.1 Feedback from Submitters on the Questions in the Call for Further Submissions

The feedback received from submitters on the explicit questions raised in the CFFS is summarised in Appendix C.

5.9.2 Additional Feedback Provided in Further Submissions

AEMO

In addition to its responses to the 19 questions in the CFFS, AEMO:

- proposed several changes to the drafting presented in the CFFS, intended to improve clarity through consistent use of terminology; and
- suggested that the deadline for approval/rejection of an Opportunistic Maintenance request should be changed from 30 minutes before Balancing Gate Closure to 60 minutes before Balancing Gate Closure.



Alinta

Alinta considered that if a Facility returns to service prior to the end of a Planned Outage then its capacity should be allowed to return to the Balancing Market as soon as available, even if Balancing Gate Closure has already occurred.

To this end, Alinta expressed support for the amendment to clause 7A.2.8A suggested by ERM Power in its first period submission for this Rule Change Proposal.

Perth Energy

In its response to question 2, Perth Energy raised concerns about the ERA's interpretation of the Market Rules in relation to the quantity of an Outage that should be logged for a Scheduled Generator. Perth Energy noted that the ERA had recently advised Perth Energy that it must log an Outage for a Trading Interval in which the generator's output was outside of its Tolerance Range at any point in time, even if it was for as little as one minute.

Perth Energy considered this interpretation significantly increased the cost of investigation and compliance activities in the WEM without any improvement in market outcomes. To address its concerns, Perth Energy considered that the proposed materiality threshold for Non-Scheduled Generators should be extended to apply to outages of Scheduled Generators.

Perth Energy also raised concerns about the calculations used by the ERA when monitoring compliance with Dispatch Instructions, and considered that further clarification regarding the calculation of outage quantities should be included in the Market Rules to address these concerns.

Perth Energy also:

- recommended that the Commissioning Test process is considered more holistically with a view to make necessary changes to allow Market Participants to fully comply with the rule requirements; and
- raised concerns about potential conflicts between the Rule Change Proposal, the Minister's WEM Reform Program and AEMO's SMST project.

Synergy

Synergy considered that this Rule Change Proposal was initially intended as part of a suite of rule changes that were designed, among other things, to clarify the Market Rules associated with many undefined concepts used in the definitions of Outages, especially the definition of Forced Outages. Synergy expressed concern that, by progressing part of the whole suite of changes in isolation, the Rule Change Panel will inadvertently cause more uncertainty regarding the interpretation of the Market Rules.

Synergy suggested that, where possible, a principled (rather than prescriptive) drafting style should be adopted to enable the Market Rules to adapt to new situations and to aid in the interpretation of undefined terms and phrases used in the Market Rules.

Synergy provided two specific examples of where it considered the Rule Change Proposal appears to introduce uncertainty into the interpretation of the Market Rules:

Synergy considered that the proposed Amending Rules (and in particular the use of the
undefined term "unavailable for dispatch") could imply that a Market Generator must
declare its Facility's capacity as unavailable in its Balancing Submission for a Trading
Interval if the Facility is offline and cannot be re-synchronised in time for that Trading



Interval. Under proposed section 7A.2A, the Market Generator would then be required to log Forced Outages for these periods.

Synergy assumed (correctly) that the temperature dependence exemption in section 7A.2A is intended to avoid the need for unnecessary Forced Outage notifications; but considered the explicit reference to only temperature dependence in this exemption creates uncertainty for the interpretation of other limitations (such as start-up times).

Synergy expressed concern about how the proposed availability declaration requirement
would apply where an Outage is required to enable maintenance or tests that must occur
either at set times or after equipment has operated for a certain number of operating
hours. Synergy considered that the proposed requirement could prevent a Market
Generator from requesting a Planned Outage at the most efficient time, reducing the
availability of the Facility and negatively affecting the economic efficiency of the WEM.

5.9.3 Submitters' Assessment of Proposal against the Wholesale Market Objectives

The assessment by submitting parties as to whether the Rule Change Proposal would better achieve the Wholesale Market Objectives is summarised below:

Submitter	Wholesale Market Objective Assessment
AEMO	AEMO considered that the proposed changes in the CFFS will better achieve Wholesale Market Objectives (a) and (d). AEMO agreed with the assessment contained within the Rule Change Proposal.
Alinta	No assessment provided.
Bluewaters	No assessment provided.
Perth Energy	Perth Energy considered that the initial Rule Change Proposal, as proposed to be amended by the Rule Change Panel in its CFFS, would better achieve the Wholesale Market Objectives. However, Perth Energy considered that if its recommendations were to be adopted, market efficiency and outcomes could be further improved.
Synergy	Aside from the issues noted in its submission and to the extent the Rule Change Proposal can be assessed without parts of the proposed drafting being available, Synergy broadly considered the rule change will better facilitate the achievement of the Wholesale Market Objectives.

5.10 The Rule Change Panel's Response to Submissions Received During the Further Submission Period

The Rule Change Panel's response to each of the specific issues raised in the further submission period is presented in Appendix D of this report. A more general discussion of the proposal, which addresses the main issues raised in further submissions and the Rule Change Panel's response to these issues, is available in sections 6.3 and 6.4 of this report.

5.11 Consultation Following the Call for Further Submissions

Following the close of the further submission period, RCP Support:

- met with AEMO on several occasions to:
 - clarify several issues raised by AEMO in its further submission;
 - seek AEMO's views on several issues raised by other stakeholders in their first period submissions and further submissions; and
 - seek feedback on potential additional changes to the proposed Amending Rules;
- met with Perth Energy to seek clarification on several issues raised in its further submission;
- met with Western Power and AEMO to discuss Western Power's concerns about the proposed mandatory inclusion of distribution network equipment on the Equipment List; and
- met with Synergy to:
 - seek clarification on the issues raised in its further submission; and
 - discuss Synergy's email response (provided on 8 January 2019) to the suggestion made by System Management in its first period submission about further changes to proposed clause 7A.2.9.

Further details relating to the matters discussed in these meetings are available in section 6.3, section 6.4 and Appendix D of this report.

5.12 Public Forums and Workshops

The Rule Change Panel did not hold a public forum or workshop for this Rule Change Proposal.



6. The Rule Change Panel's Draft Assessment

6.1 Assessment Criteria

In preparing its Draft Rule Change Report, the Rule Change Panel must assess the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3 of the Market Rules.

Clause 2.4.2 of the Market Rules states that the Rule Change Panel "must not make Amending Rules unless it is satisfied that the Market Rules, as proposed to be amended or replaced, are consistent with the Wholesale Market Objectives". Additionally, clause 2.4.3 of the Market Rules states that, when deciding whether to make Amending Rules, the Rule Change Panel must have regard to:

- any applicable statement of policy principles the Minister has issued to the Rule Change Panel under clause 2.5.2 of the Market Rules;
- the practicality and cost of implementing the proposal;
- the views expressed in submissions and by the MAC; and
- any technical studies that the Rule Change Panel considers necessary to assist in assessing the Rule Change Proposal.

In making its draft decision, the Rule Change Panel has had regard to each of the matters identified in clauses 2.4.2 and 2.4.3 of the Market Rules as follows:

- the Rule Change Panel's assessment of the Rule Change Proposal against the Wholesale Market Objectives is available in section 6.6 of this report;
- the Rule Change Panel notes that there has not been any applicable statement of policy principles from the Minister in respect of this Rule Change Proposal;
- the Rule Change Panel's assessment of the practicality and cost of implementing the Rule Change Proposal is available in section 6.8 of this report;
- a summary of the views expressed in submissions and by the MAC is available in section 5 of this report. The Rule Change Panel's response to these views is available in sections 6.3 and 6.4, Appendix B and Appendix D of this report; and
- the Rule Change Panel does not believe a technical study in respect of this Rule Change Proposal is required and therefore has not commissioned one.

The Rule Change Panel's assessment is presented in the following sections.

6.2 General Considerations

6.2.1 Outage Planning Objectives and Rule Change Proposal Assessment Factors

During the 7 November 2018 workshop, attendees discussed a number of outage planning objectives¹⁸ that reflect the ways in which the WEM's outage planning regime can work to promote the Wholesale Market Objectives. These outage planning objectives included:

- assisting System Management to maintain power system security and reliability;
- providing transparency to Rule Participants to reduce the market risks/costs associated with outages;

 $^{^{\}mbox{\scriptsize 18}}$ See slide 4 of the workshop discussion notes, available on the Rule Change Panel's website.



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- providing mechanisms for Rule Participants to efficiently manage their facility maintenance, and encouraging use of these mechanisms to:
 - efficiently coordinate network and generator outages;
 - undertake an efficient level of maintenance that balances maintenance costs against the need to meet reliability obligations; and
 - manage the timing of outages efficiently to reduce their impact on market costs; and
- supporting the integrity of the Reserve Capacity Mechanism (**RCM**) by helping to ensure that Market Participants deliver the capacity service for which they are paid.

In conducting its assessment of this Rule Change Proposal against the broader Wholesale Market Objectives, the Rule Change Panel has considered each of the identified outage planning objectives, and balanced the competing objectives where necessary.

Consistent with these outage planning objectives, the Wholesale Market Objectives in general, and considerations of cost and practicality; the Rule Change Panel has generally sought to give preference to options that:

- improve transparency of processes and outage-related information;
- provide as much certainty as possible as early as possible to System Management and other Rule Participants;
- encourage forward planning and reward reliability;
- provide flexibility for Rule Participants;
- avoid unnecessary obligations or administrative burdens;
- avoid unwarranted complexity or system development costs;
- avoid planning obligations on Rule Participants with which they cannot comply; and
- discourage the withholding of information from AEMO.

6.2.2 Factors Affecting this Rule Change Proposal

Based on its preliminary assessment of the Rule Change Proposal, the Rule Change Panel concluded that the proposed Amending Rules, if updated to reflect the changes made to the Market Rules since the submission of the Rule Change Proposal, are still valid to be considered via the rule change process.

However, the Rule Change Panel identified several issues warranting additional consideration.¹⁹ These include:

- concerns that affect the proposed solutions to the Rule Change Proposal's 13 issues (which are discussed in section 6.3 of this report); and
- several new but related issues (which are discussed in section 6.4 of this report).

The following factors contributed to the identification of these issues.

• Energy Market Operations and Processes (EMOP) project: The scope of the EMR's EMOP project included revising the WEM outage planning processes to support proposed reforms to the real-time energy market. The EMOP project team worked with a group of industry representatives (EMOP Consultation Group) on a straw man

Most of these issues were discussed with stakeholders at the 17 September 2018 and 7 November 2018 workshops and were included in the CFFS.



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proposal for outage planning in workshops held between 31 October 2016 and 27 February 2017. The work took the reforms proposed in this Rule Change Proposal as a starting point, and identified several issues with, and potential enhancements to those reforms.

Many of the changes proposed by the EMOP project are either outside the scope of this Rule Change Proposal or require material system changes that are unlikely to be justified before the implementation of the WEM Reform Program in 2022. However, the Rule Change Panel has considered whether to incorporate a few of the simpler refinements into this Rule Change Proposal.

• Interpretation of 'removal from service': Clause 3.18.4A defines an Outage Plan as:

"a proposal submitted to System Management in accordance with this clause 3.18 by a Market Participant or Network Operator in which permission is sought from System Management for the scheduling of the <u>removal from service</u> (or derating) of an item of equipment". [emphasis added]

In early 2017, Bluewaters sought a declaration from the Supreme Court of Western Australia to require AEMO to evaluate an Outage Plan submitted for a Facility that had tripped and was still out of service.

The Supreme Court's decision (**Bluewaters decision**)²⁰ was delivered on 13 April 2017, and rejected Bluewaters' action. The Supreme Court concluded that an item of equipment could not be removed from service if it was already out of service, and so:

"a proposal submitted to System Management by a Market Participant in which permission is sought for the scheduling of the removal from service of an item of equipment is not a proposed Outage Plan as defined by clause 3.18.4A of the Market Rules if the item of equipment is out of service at the time the proposal is submitted and the Market Participant expects and intends that the item of equipment will remain out of service until the commencement of the proposed outage plan. The Market Rules do not require System Management to evaluate such a proposal as an Outage Plan."

As discussed in sections 6.3.4.1 (interpretation of removal from service) and 6.4.3.1 (Commissioning tests and outages) of this report, the Bluewaters decision has highlighted the need for additional changes to the proposed Amending Rules in this Rule Change Proposal to allow the Rule Change Proposal to achieve its intended outcomes in relation to the availability requirements for Planned Outages and Planned Outage extensions, and the undertaking of Commissioning Tests under a Planned Outage.

- Consultation on Rule Change Proposal: Administrative Improvements to the Outage Process (RC_2014_03):²¹ The IMO submitted RC_2014_03 to implement a range of administrative reforms that mostly affect the processes for Consequential and Forced Outages. RCP Support has discussed RC_2014_03 with stakeholders on several occasions, including:
 - during updates on the proposal at the 13 September 2017, 13 December 2017 and 14 February 2018 MAC meetings; and

The Rule Change Panel is currently progressing RC_2014_03, which the IMO submitted on 27 November 2014.



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Bluewaters Power 2 Pty Ltd –v- Australian Energy Market Operator Ltd [2017] WASC 98, available from: https://ecourts.justice.wa.gov.au/eCourtsPortal/Decisions/ViewDecision?returnUrl=%2feCourtsPortal%2fDecisions%2fFilter%2fSC%2fCitationNumber&id=d6ad0c85-c57f-4a38-4825-8101001537ba.

 at a MAC workshop held on 17 January 2018 to discuss specific aspects of that Rule Change Proposal.

These discussions raised several issues, some of which affect Planned Outages as well as Forced and Consequential Outages (e.g. the need for a materiality threshold for Non-Scheduled Generator Outages). The Rule Change Panel has taken the issues that affect Planned Outages into account in its assessment of this Rule Change Proposal (RC_2013_15).

• Rule Change Proposal: Removal of Resource Plans and Dispatchable Loads (RC_2014_06): As noted in section 4.1.2 of this report, RC_2014_06 includes changes to clarify the treatment of unavailable capacity in Balancing Submissions that are very similar, but not identical, to the corresponding changes in this Rule Change Proposal (RC_2013_15). Section 6.3.2.1 of this report discusses the differences between the two Rule Change Proposals.

6.3 Assessment of the Proposed Changes

This section presents the Rule Change Panel's assessment of the issues raised in the Rule Change Proposal and the amendments that were proposed by the IMO to address those issues.

The section is structured as follows:

- section 6.3.1 discusses the issues that relate to obligations to participate in the outage planning process;
- section 6.3.2 discusses the issues that relate to interactions between Planned Outages and Balancing Submissions;
- section 6.3.3 discusses the issues that relate to timelines for Planned Outages;
- section 6.3.4 discusses the issues that relate to availability criteria for approval of Planned Outages; and
- section 6.3.5 discusses the minor enhancements proposed by the IMO to improve the integrity and clarity of the outage planning provisions in the Market Rules.

6.3.1 Obligations to Participate in the Outage Planning Process

This Rule Change Proposal proposes three changes to refine and clarify the obligations on Rule Participants to participate in the outage planning process:

- removal of the requirement for Demand Side Programmes, Dispatchable Loads and Interruptible Loads holding Capacity Credits to be included in the Equipment List;
- amendment of clause 3.18.2(c)(i) to require the Equipment List to include "any part of a transmission system or distribution system (however defined by System Management) that could limit the output of a generation system included on the Equipment List"; and
- clarification of the requirement on Market Participants to request (or for Small Outage Facilities to report) a Planned Outage prior to undertaking discretionary maintenance on their Outage Facilities.

6.3.1.1 Equipment List: Demand Side Programmes and Associated Loads, Dispatchable Loads and Interruptible Loads (Issue 1)

The IMO proposed to restrict the Facilities included on the Equipment List under clause 3.18.2(c)(ii) to Scheduled Generators and Non-Scheduled Generators holding Capacity Credits with a Standing Data nameplate capacity of at least 10 MW.

The Rule Change Panel supports the proposed change, as it agrees with the argument presented in the Rule Change Proposal by the IMO that:

- there is no need for Demand Side Programmes or their Associated Loads to be included on the Equipment List; and
- Interruptible Loads should only need to be included on the Equipment List if they provide Spinning Reserve Service under an Ancillary Service Contract, in which case they will be included independently under clause 3.18.2(c)(iv).

The only other Facility Class that is eligible for Capacity Credits (Dispatchable Load) will be removed from the Market Rules by RC_2014_06 from 1 July 2019.

Stakeholders were generally supportive of the change in their first period submissions and raised no concerns during a discussion of the issue at the 17 September 2018 workshop or in further submissions.

6.3.1.2 Equipment List: Network equipment (Issue 2)

Currently clause 3.18.2(c)(i) requires "all transmission network Registered Facilities" to be included on the Equipment List. The IMO proposed to amend this clause to require the inclusion of "any part of a transmission system or a distribution system (however defined by System Management) that could limit the output of a generation system that System Management has included on the Equipment List".

The Rule Change Panel agrees that it is inefficient to require System Management to schedule outages for all components of the transmission system, given that only some components have the potential to affect power system security and reliability.

The Rule Change Panel also agrees in principle that if a generation system is required on the Equipment List, then any network equipment (whether transmission or distribution) that could limit that generation system's output should also be on the Equipment List. In particular, inclusion of the relevant distribution circuits on the Equipment List would:

- allow the use of consistent processes to manage all network outages affecting Equipment List generators; and
- improve the quality of PASA forecasts and reserve margin calculations through the provision of more accurate and timely information about network outages affecting distribution-connected generators.

While Bluewaters considered in its first period submission that the Equipment List should exclude network equipment, it recently advised the Rule Change Panel²² that its position has shifted since the first submission period. Bluewaters advised that it now supports the changes proposed by the IMO and considers that they are an improvement on the current rules.

In an email provided on 12 February 2019 to RCP Support.



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Community Electricity and Perth Energy both supported the change in their first period submissions.

However, Western Power has on several occasions questioned the value of including distribution network equipment on the Equipment List, and raised concerns about the costs to Western Power of complying with the proposed obligations. RCP Support met with Western Power and AEMO on 23 January 2019 and 14 February 2019 to discuss Western Power's concerns in more detail.

During the 23 January 2019 meeting, Western Power:

- noted that distribution-connected generators may be either connected at a zone sub-station or embedded within the distribution network, and that its concerns only related to generators embedded with the distribution network;
- noted that the generators in question represent a very small percentage of the registered generation in the WEM, and considered their impact on power system security and reliability was negligible;
- advised that it would not be able to comply with the proposed Amending Rules without IT
 and process changes that would require material cost and time to implement, and that
 the new obligations would also adversely affect the efficiency of Western Power's
 maintenance program and its ability to meet its obligations under other legislation;
- proposed an alternative approach for distribution-connected generators embedded within the distribution network, under which Western Power would:
 - make changes to its IT systems to automatically alert its staff if a proposed outage in the distribution system could potentially affect a distribution-connected generator;
 - on receiving an alert, manually assess the situation, and if appropriate, send an email to AEMO to notify it of the proposed outage; and
 - proceed with the proposed outage unless AEMO informs it that the relevant generator's capacity is needed to maintain power system security and reliability.

Western Power advised that it usually would provide between 2 and 5 Business Days' notice to generators that may be impacted by the network outages, but could not guarantee this in all cases, as there may be circumstances which prevent such notification. Since the arrangement would be between Western Power and AEMO, Western Power indicated that it would prefer that the arrangement be covered in Western Power and AEMO's confidential Operating Protocol rather than the Market Rules. This would allow greater flexibility for Western Power and AEMO by excluding the need to go through a lengthy procedure change process should both organisations determine that there was a need to change the arrangements.

Western Power also confirmed that it would often only be able to provide AEMO and the Market Generator with a broad time band within which an outage was expected to occur, rather than precise start and end times.

AEMO agreed with Western Power that the impact of the relevant generators on power system security and reliability was negligible; and advised that it did not require advance notice of, or control over, Consequential Outages of these generators to support its PASA and outage assessment processes. AEMO found Western Power's proposed alternative to be acceptable but did not want any changes that would impose obligations on AEMO to notify Market Generators or publish details of the network/generator outages on the Market Web Site.



During the 14 February 2019 meeting, Western Power and AEMO advised that inclusion in the Market Rules of any obligation on Western Power to request or report outages of the relevant distribution equipment would require Western Power to align its IT system for the distribution network with the IT system for the transmission network:

- to identify the generators connected at the distribution feeder level impacted by Planned Outages; and
- to provide automatic notification of the impacted distribution generators to AEMO via SMMITS.

Following the 14 February 2019 meeting, Western Power provided RCP Support with a cost estimate to meet the proposed requirements for distribution system equipment. The estimate, which was provided on a confidential basis, was very high, far exceeding the other expected implementation costs of this Rule Change Proposal.

Western Power advised that it could implement its alternative arrangement at no additional cost because the required system and process upgrades could be undertaken as part of Western Power's business-as-usual activities.

The Rule Change Panel agrees that the cost estimated by Western Power outweighs any potential benefits of the change, given:

- AEMO's advice that it does not require any advance warning of outages for the relevant generators for its PASA and outage processes;
- Western Power's advice that it is likely to only be able to provide indicative outage period start and end times, so that the relevant generators would still not be in a position to log ex-ante Consequential Outages or adjust their Balancing Submissions; and
- the current low levels of distribution-connected Scheduled Generators in the WEM.

The Rule Change Panel therefore proposes a further change to proposed clause 3.18.2(c)(i) to restrict the obligation to transmission system equipment only.

6.3.1.3 Requirements to follow the outage planning process (Issue 3)

The Rule Change Panel supports the proposed amendment of clause 3.18.2A(b) and addition of proposed clause 3.19.2A to include an explicit obligation on Market Participants to request (or report, as applicable) a Planned Outage before undertaking discretionary maintenance on their Outage Facilities.

The Rule Change Panel agrees that, while various clauses of the Market Rules imply an obligation to follow the outage planning processes, an explicit obligation is preferable, in particular because the primary incentive to seek approval of a Planned Outage (to avoid the Capacity Cost Refunds) applies only to Scheduled Generators with Capacity Credits that have not exceeded their 1000 Trading Day Planned Outage limit.²³ For this reason, the Rule Change Panel also considers that the obligations should apply to all Outage Facilities, including network equipment, and proposes additional changes to clause 3.19.2A to reflect this.

Stakeholders were generally supportive of the proposed changes in their first period submissions and raised no concerns during a discussion of the issue at the 17 September 2018 workshop or in further submissions.

The Market Rules place a limit on how long a Scheduled Generator can be on a Planned Outage over any 1000 Trading Day period. If this limit is exceeded then the Market Generator is liable for Facility Reserve Capacity Deficit Refunds for any additional Planned Outages taken in that period.



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6.3.2 Interactions between Planned Outages and Balancing Submissions

This Rule Change Proposal seeks to clarify how unavailable or potentially unavailable capacity should be treated in Balancing Submissions. The proposed amendments include clarification of:

- how available and unavailable capacity should be reported in Balancing Submissions;
- what deadline should apply to decisions on requests for approval of Scheduled Outages and Opportunistic Maintenance;
- how capacity subject to an approved Planned Outage or an outstanding request for approval of a Planned Outage should be represented in Balancing Submissions;
- Market Generator obligations to account for capacity declared as unavailable in Balancing Submissions; and
- Market Generator obligations in the event of a late rejection of a previously approved Planned Outage or the recall of a Planned Outage in progress.

6.3.2.1 Balancing Submission unavailability declarations (Issue 4)

The Rule Change Proposal proposes new clauses 7A.2.4A, 7A.2.4B and 7A.2.4C, as well as changes to clause 7A.2.4 and the Glossary definition of Balancing Submission, to clearly specify how available and unavailable capacity should be reported in Balancing Submissions. The first period submissions supported these amendments, and the Rule Change Panel agrees that changes are needed to provide clarity to Market Generators on this aspect of their Balancing Submission obligations.

The Amending Rules for RC_2014_06 include similar changes. However, the requirements for Non-Scheduled Generators in RC_2014_06 differ from those in this Rule Change Proposal, in that RC_2014_06 explicitly requires the inclusion of a single Balancing Price-Quantity Pair and does not require a declaration of the MW quantity that will be unavailable for dispatch.

The Rule Change Panel, during the 17 September 2018 workshop and in the CFFS, sought feedback on the need to include declared MW quantities of unavailable capacity in Non-Scheduled Generator Balancing Submissions. The feedback provided by AEMO and other stakeholders all agreed that these unavailable capacity details are not required.

The Rule Change Panel agrees that a requirement to include unavailable capacity details in Non-Scheduled Generator Balancing Submissions would serve no purpose and impose an unnecessary administrative burden on Market Generators. The Rule Change Panel therefore proposes additional changes to the proposed Amending Rules to remove the requirement and align the drafting of clause 7A.2.4B with the version that will be implemented on 1 July 2019 by RC_2014_06.

The Rule Change Panel notes that the corresponding obligation in proposed clause 7A.2.4C to include the unavailable Non-Scheduled Generator capacity in Balancing Portfolio Balancing Submissions places a similar, unnecessary administrative burden on Synergy. To address this concern, the Rule Change Panel proposes:

- an additional change to clause 7A.2.4C, to restrict the unavailable capacity declaration in Balancing Portfolio Balancing Submissions to the unavailable capacity of Scheduled Generators;
- consequential changes to clause 7A.2.9(g), to reflect that Synergy would not need to modify the unavailable quantities in its Balancing Submissions to reflect the approval of



- a request for Opportunistic Maintenance for a Non-Scheduled Generator in the Balancing Portfolio; and
- consequential changes to clause 7A.2.9A, to apply the obligations to Scheduled Generator capacity only.

6.3.2.2 Deadline for approval of a Planned Outage (Issue 5)

This Rule Change Proposal proposes changes to clause 3.19.2 to set the deadline for requesting Opportunistic Maintenance to 30 minutes before Balancing Gate Closure for the Trading Interval in which the outage is due to commence. The Rule Change Proposal also proposes a new clause 3.19.4A, which specifies that if System Management has not provided a Rule Participant with a decision on a request for approval of a Planned Outage (including a Scheduled Outage or Opportunistic Maintenance) by this time, then for the purposes of the Market Rules the request is deemed to be rejected.

The Rule Change Panel supports the proposed changes in relation to Opportunistic Maintenance. The establishment of a specific deadline for decisions on Opportunistic Maintenance requests provides certainty for Rule Participants and System Management. Additionally, the choice of 30 minutes before Balancing Gate Closure provides as much time as possible for the processing of requests while still ensuring that Market Generators have sufficient time to adjust their final Balancing Submissions to reflect the approval or rejection (as applicable) of a request. Several first period submissions supported this deadline, as did attendees at the 17 September 2018 workshop.

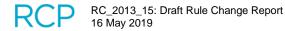
However, during the development of an outage planning straw man for the EMOP project, several EMOP Consultation Group members raised concerns that the deadline proposed in this Rule Change Proposal would be too late to provide certainty about whether a Scheduled Outage would proceed. Considering that Scheduled Outages can be major events that are requested up to three years in advance, can run for several months, and require complex arrangements for resourcing and bilateral cover, it may be inefficient to leave the confirmation of such outages until so late in the process.

The EMOP Consultation Group agreed that 2:00 PM on TD-2 is an appropriate deadline for approval of Scheduled Outages, as it provides a balance between the need for certainty and the flexibility benefits of a later deadline. Attendees at the 17 September 2018 supported this deadline, as did AEMO and Alinta in their further submissions.

Bluewaters and Perth Energy suggested in their further submissions that a specific time limit should be placed on AEMO to provide decisions on Scheduled Outage approval requests. Perth Energy considered that AEMO should be required to approve or reject the request by the earlier of:

- 15 Business Days after the request is submitted; and
- 2:00 PM on TD-2.

The Rule Change Panel does not support a specific time period limit for these decisions. AEMO is already required under clause 3.19.4 to make decisions on Scheduled Outage approval requests as soon as practicable, which in many cases should be well before the suggested 15 Business Day deadline. A requirement to provide a decision within a limited period after the submission of the request is therefore unlikely to increase the number of early approval decisions, and in some situations could force AEMO to reject a request that it might be able to approve later when more accurate information is available. This would reduce the efficiency and flexibility of the outage planning process.



The Rule Change Panel considers that a deadline of 2:00 PM on TD-2 provides an appropriate balance between the need for certainty and the flexibility benefits of a later deadline. The Rule Change Panel therefore proposes:

- an additional change to proposed clause 3.19.4A to set the deadline for decisions on Scheduled Outage approval requests to 2:00 PM on TD-2; and
- consequential changes to proposed clauses 7A.2.8A(b), 7A.2.9(g) and 7A.2.9A(b) to reflect that these decisions will occur well before any of the relevant Trading Intervals fall into the Balancing Horizon.

During the 17 September 2018 workshop, there was some discussion about whether any further prescription or guidance should be included in the Market Rules around the practical application of clause 3.19.4. The Rule Change Panel sought stakeholder views on this question in the CFFS. No requests or suggestions for additional prescription or guidelines were provided in the further submissions²⁴, and the Rule Change Panel does not consider a need has been demonstrated for additional prescription or guidelines at this time. The Rule Change Panel does not therefore propose any additional changes to clarify the application of clause 3.19.4.

6.3.2.3 Representation of non-Balancing Portfolio Capacity affected by Planned Outages (Issue 6)

The Rule Change Panel agrees with the intent of proposed clause 7A.2.8A, and specifically with the principle that if Scheduled Generator capacity is subject to an outstanding Opportunistic Maintenance request then it should be declared as unavailable in the Balancing Facility's Balancing Submissions. The Rule Change Panel notes that historically Opportunistic Maintenance requests have been approved more often than not. This means that making the capacity unavailable in the Forecast BMO earlier is likely to:

- improve transparency and the likely accuracy of Balancing Forecasts and Forecast BMOs; and
- assist System Management's assessment of the request because the Forecast BMO will reflect the impact of the outage.

Community Electricity, Perth Energy and Bluewaters supported the proposed approach in their first period submissions. ERM Power raised no concerns about the proposed approach but suggested an amendment to proposed clause 7A.2.8A to allow a Balancing Facility to return to the Balancing Market before the scheduled end time of its Planned Outage.

Attendees at the 17 September 2018 workshop raised no specific concerns about the proposed approach. However, Collgar opposed the proposed approach in its late first period submission, as it considered that the associated obligations on Market Generators to update their Balancing Submissions were unreasonable and added further complexity to an already onerous process.

The Rule Change Panel acknowledges that a Market Generator will need to update its Balancing Submissions if it decides to submit a request for Trading Intervals already within the Balancing Horizon; and will also need to update its Balancing Submissions if a request for Trading Intervals within the Balancing Horizon is rejected by System Management. However, under the alternative approach, a Market Generator would need to update its

Apart from the suggestions made by Bluewaters and Perth Energy for the imposition of specific time period limit for decisions on Scheduled Outage approval requests.



Balancing Submissions whenever a request that affected Trading Intervals already within the Balancing Horizon was approved.

Whether the proposed approach will increase or decrease a given Market Generator's administrative costs is likely to depend on when and under what circumstances it submits its Opportunistic Maintenance requests. However, the Rule Change Panel considers that any potential additional administrative costs would be minor compared with the transparency benefits of the proposed approach.

6.3.2.4 Representation of Balancing Portfolio Capacity affected by Planned Outages (Issue 7)

This Rule Change Proposal treats Balancing Portfolio capacity that is subject to an outstanding Planned Outage approval request differently to the corresponding capacity of other Balancing Facilities.

Under the proposed approach, Synergy must declare such capacity as available in the Balancing Submissions for the relevant Trading Intervals. If Synergy receives approval for a request later than its usual gate closure time, it is required under proposed clause 7A.2.9(g):

- to amend its Balancing Submissions for the affected Trading Intervals to make the relevant capacity unavailable; and
- to remove the capacity from its highest price Balancing Price-Quantity Pairs, leaving its lower price Balancing Price-Quantity Pairs unchanged.

The proposed approach aimed to prevent any significant changes to Synergy's Balancing Submissions (and therefore Balancing Market outcomes) occurring after Synergy's normal gate closure due to the late approval of a Planned Outage, while allowing Synergy the same time window for requesting Opportunistic Maintenance as other Market Generators.

First period submissions and attendees at the 17 September 2018 workshop generally supported the proposed approach. However, in its first period submission, System Management suggested that Synergy should also be required to resubmit Balancing Submissions as soon as it becomes aware of a Forced Outage (even after its normal gate closure time), as all other Market Generators are required to do under clause 7A.2.10. System Management considered that this would improve the accuracy of the Forecast BMO by removing any Balancing Portfolio capacity that is subject to a Forced Outage. System Management noted that, while clauses 7A.2.9(e) and 7A.2.9(f) allow Synergy to update its Balancing Submissions after gate closure in some cases to reflect Forced Outages, there is no obligation on Synergy to do so.

During the further submission period, RCP Support sought Synergy's views on System Management's suggestion. Synergy's response was that both proposed clause 7A.2.9(g) and System Management's proposal would likely impose an unnecessary burden on Synergy. In particular, Synergy would need to change its systems and roster traders outside current hours to enable these post-gate closure resubmissions, which would only reduce quantities and therefore not provide any price benefit to Synergy or the market.

The Rule Change Panel supports the proposal to declare Balancing Portfolio capacity subject to an outstanding Opportunistic Maintenance request as available in Balancing Submissions. The Rule Change Panel also agrees that a failure to remove excess capacity from the Balancing Portfolio's Balancing Submissions to reflect a Forced Outage or late approval of a Planned Outage would usually have no material effect on the Balancing Market, as the excess capacity would be well above the margin. However, on occasions



where the reserve margin is low, the presence of such capacity in the BMO or a Forecast BMO has the potential to reduce transparency and distort market outcomes.

Accordingly, the Rule Change Panel proposes additional changes to clause 7A.2.9(g) to implement an alternative approach that was developed in consultation with Synergy and AEMO. Under this approach, Synergy is responsible for updating its Balancing Submissions to reflect a Forced Outage or the late approval of a Planned Outage, but is not required to make the updates unless there is a credible risk that the excess capacity will distort the operation of the Balancing Market.

Synergy already has the option (but not the obligation) to update its Balancing Submissions after its normal gate closure under clauses 7A.2.9(e) to 7A.2.9(f). Synergy may be able to update its Balancing Submissions under those clauses and take advantage of the opportunity to revise its prices, but otherwise it will be obliged to reduce the quantities as originally proposed in clause 7A.2.9(g).

6.3.2.5 Capacity Declared as Unavailable in Balancing Submissions (Issues 6 and 7)

Proposed clause 7A.2A.1 states that a Market Generator must, as soon as practicable after Balancing Gate Closure for each Trading Interval, for each of its Balancing Facilities that is an Outage Facility, ensure that it has notified AEMO of a Forced Outage or Consequential Outage for any capacity declared unavailable in the Facility's Balancing Submission that:

- was not subject to an approved Planned Outage or Consequential Outage at Balancing Gate Closure for the Trading Interval; and
- is not attributable to a difference between the expected temperature at the site during the Trading Interval and the temperature at which the Sent Out Capacity of the Facility was determined.

Proposed clause 7A.2A.2 imposes corresponding obligations on Synergy in respect of the Balancing Portfolio, which take into account its different gate closure arrangements.

Under clause 4.12.1(c) of the Market Rules, a Market Generator holding Capacity Credits is obliged to make the associated capacity (excluding any capacity that is subject to an Outage) available for dispatch. For this reason, the Rule Change Panel supports the intent of proposed clauses 7A.2A.1 and 7A.2A.2 in respect of capacity for which a Market Generator holds Capacity Credits.

However, the obligation under clause 4.12.1(c) does not extend to capacity for which the Market Generator does not receive Capacity Credits. This implies that a Market Generator should be able to make such capacity unavailable in its Balancing Submissions if it chooses.²⁵

As drafted, proposed clauses 7A.2A.1 and 7A.2A.2 require that if a Market Generator chooses to make capacity for which it does not receive Capacity Credits unavailable in its Balancing Submission, it must either request or report²⁶ a Planned Outage in advance, or report a Forced Outage after gate closure. The Rule Change Panel considers this constitutes an unwarranted and inefficient administrative burden on Market Generators.

The question of whether Market Generators should be obliged to request or report Outages in these circumstances, along with the broader question of whether AEMO should take generator capacity that is not subject to Capacity Credits into account when determining

As applicable, depending on whether the Outage Facility is an Equipment List Facility or a Small Outage Facility.



Note this does not affect the Market Generator's obligations to comply with directions issued by System Management in an emergency.

PASA reserve margins, was discussed at the 17 September 2018 workshop. Attendees agreed that both questions should be raised in the CFFS.

In their further submissions, AEMO, Alinta and Perth Energy agreed that Market Generators should not be required to request or report an Outage in these circumstances. However, Bluewaters suggested that the outage information could be useful if reserve margin calculations take capacity that is not subject to Capacity Credits into account.

The question of how PASA studies should treat this capacity is outside the scope of this Rule Change Proposal. However, for AEMO to include any such capacity in the reserve margin it would need to be confident that the Market Generator will choose to offer that capacity, given that it has no obligation to do so under normal circumstances.

Stakeholders raised no other concerns about proposed clauses 7A.2A.1 and 7A.2A.2 in submissions or other forums.

The Rule Change Panel proposes additional changes to clauses 7A.2A.1 and 7A.2A.2 to limit the scope of the clauses to capacity associated with Capacity Credits. The Rule Change Panel notes that these changes also account for temperature-related de-rating up to 41 degrees Celsius, because Capacity Credits are only assigned to capacity that is available up to this temperature. The Rule Change Panel therefore proposes to replace the original temperature de-rating exemptions in the proposed clauses with exemptions covering situations where the Market Generator has a reasonable expectation that the maximum site temperature for the applicable Trading Day will exceed 41 degrees Celsius.

The Rule Change Panel also proposes to amend proposed clauses 7A.2A.1(a) and 7A.2A.2(a) (now renumbered to clauses 7A.2A.1(b) and 7A.2A.2(b)) to extend the exemptions for capacity subject to approved Planned Outages and Consequential Outages to cover capacity that is subject to an approved Commissioning Test Plan. The change is to reflect that during a period covered by an approved Commissioning Test Plan the Facility is only expected to participate in the Balancing Market to the extent specified in the associated Commissioning Tests.

System Management will still need to know when generator capacity that is not subject to Capacity Credits is, or will be, genuinely 'unavailable for service' (i.e. physically unable to respond to a System Management direction in an emergency)²⁷. This means that Market Generators will still be required to follow the normal outage processes for this capacity (e.g. to request or report a Planned Outage before undertaking maintenance on their Facilities). However, the Rule Change Panel notes that its proposed changes to clauses 7A.2A.1 and 7A.2A.2 allow such capacity to be declared unavailable for dispatch through the Balancing Market in a Balancing Submission, and still qualify as 'available for service'.

The Rule Change Panel also proposes additional changes to clause 3.19.2A to clarify that the obligation in that clause to request approval for a Scheduled Outage or Opportunistic Maintenance only applies to capacity that is being made unavailable to allow it to undergo maintenance.

See section 6.4.3.2 for further discussion of the concept of 'unavailable for service'.



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6.3.2.6 Re-entry to Balancing Market after Planned Outage Recall or Late Rejection (Issues 6 and 7)

On rare occasions, System Management may reject a previously approved Planned Outage under clause 3.19.5 shortly before it is due to commence. Proposed clause 7A.2.9B requires a Market Generator in this situation to update its Balancing Submission for any Trading Intervals in the Balancing Horizon for which Balancing Gate Closure has not yet occurred, to make the relevant capacity available for dispatch. The proposed obligation applies to all Scheduled Generators and Non-Scheduled Generators, including those in the Balancing Portfolio.

If a rejection occurs late enough, the Market Generator may not be able to update its Balancing Submissions in time for the capacity to be available in the BMO for the first Trading Interval(s) of the rejected outage period. To ensure that Market Generators are not unduly penalised, proposed clause 7A.2A.3 provides an exemption from the requirements of proposed clauses 7A.2A.1 and 7A.2A.2 in these situations.

Figure 6.1 provides an example of the proposed arrangements for a non-Synergy Balancing Facility. In this example, System Management rejects a Planned Outage at 9:15 AM that is due to start at 11:00 AM. When this occurs:

- It is too late for the Market Generator to update its Balancing Submission for the 11:00 AM Trading Interval²⁸, because Balancing Gate Closure for this Trading Interval (9:00 AM) has already passed. The Market Generator is not required to log a Forced Outage under proposed clause 7A.2A.1, because at 9:00 AM the relevant 'unavailable capacity' was still subject to an approved Planned Outage.
- If it can respond fast enough, the Market Generator may be able to update its Balancing Submission for the 11:30 AM Trading Interval by Balancing Gate Closure (9:30 AM). The Market Generator is not penalised if it fails to update its Balancing Submission by this time, because under clause 7A.2A.3, the requirement to report a Forced Outage does not apply if the Planned Outage was rejected less than 30 minutes before Balancing Gate Closure. In this example the Planned Outage was rejected only 15 minutes before the 9:30 AM Balancing Gate Closure for the 11:30 AM Trading Interval.
- The Market Generator is required to update its Balancing Submission for the 12:00 PM Trading Interval (and later Trading Intervals) or report a Forced Outage under proposed clause 7A.2A.1. The exemption under clause 7A.2A.3 does not apply to the 12:00 PM Trading Interval, because the Planned Outage was rejected more than 30 minutes before Balancing Gate Closure (i.e. 45 minutes before the 10:00 AM Balancing Gate Closure for the 12:00 PM Trading Interval).

In this report a Trading Interval is identified by its start time (e.g. the 11:00 AM Trading Interval starts at 11:00 AM and ends at 11:30 AM).



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8:00 AM T Key 8:30 AM No requirement to update Balancing Submission. Balancing Gate Closure for 11:00 AM -¹→ 9:00 AM -Best endeavours to update Planned Outage rejected at 9:15 AM -Must update or report Forced Outage. Balancing Gate Closure for 11:30 AM -→ 9:30 AM Balancing Gate Closure for 12:00 PM → 10:00 AM 10:30 AM -Planned Outage start time -> 11:00 AM -Too late to update Balancing Submission (Balancing Gate Closure was at 9:00 AM) 11:30 AM -May be able to update Balancing Submission (Balancing Gate Closure is at 9:30 AM) 12:00 PM-12:30 PM-Required to update Balancing Submission (for Balancing Gate Closure at 10:00 AM or later) 1:00 PM 1:30 PM -2:00 PM 2:30 PM -3:00 PM -3:30 PM-4:00 PM

Figure 6.1: Late rejection of a Planned Outage - Rule Change Proposal

The IMO proposed a similar approach where a Market Generator is directed by System Management to return capacity to service early from a Planned Outage under clause 3.20.1. Proposed clause 7A.2.9C requires the Market Generator to update its Balancing Submission for any relevant Trading Intervals in the Balancing Horizon for which Balancing Gate Closure has not yet occurred, to reflect the impact of System Management's direction on the proposed end time of the Planned Outage.

The Rule Change Panel supports the intent of the clauses to clarify Market Generator obligations in these situations and to ensure that required capacity is returned to the Balancing Market as soon as practicable. Stakeholders raised no concerns about the clauses in first period submissions or in other forums.

Return of capacity to the Balancing Market after Balancing Gate Closure

During the 17 September 2018 workshop, attendees discussed whether System Management should be allowed, in the event of a late rejection or recall of an approved Planned Outage, to direct the Market Generator to return the relevant capacity to the

Balancing Market as soon as practicable, even if this is after Balancing Gate Closure. Attendees expressed general support for this concept.

The Rule Change Panel subsequently sought stakeholder views on the concept in the CFFS. While AEMO, Alinta and Bluewaters remained generally supportive of the concept (subject to various refinements), Perth Energy was strongly opposed, considering that the benefits of the suggested change would be outweighed by its costs.

On 23 January 2019, RCP Support met with Perth Energy to discuss its concerns in more detail. Perth Energy explained that it had recently made changes to its IT systems to ensure it does not inadvertently submit late Balancing Submissions that do not comply with the Market Rules. A new requirement to provide Balancing Submission updates after Balancing Gate Closure, following the late rejection of a Planned Outage or the recall of a Balancing Facility on a Planned Outage, would impose significant additional IT costs on Perth Energy.

The Rule Change Panel has reassessed the potential benefits of the change in response to Perth Energy's concerns. The Rule Change Panel notes that in the emergency situations under consideration, System Management can direct a Market Generator to provide capacity even if that capacity is not in the BMO. If the Market Generator can comply, then it will receive the Balancing Price for any energy it produces. Although the Market Generator is not eligible for constrained on compensation until the capacity is returned to the BMO, the Balancing Price is likely to be high enough in these cases to provide a reasonable level of compensation for the short period in question.

In addition, the Rule Change Panel agrees with Perth Energy that these situations are unlikely to occur often (or even at all) before October 2022, when material changes to the gate closure rules and Market Participant systems are anticipated.

For these reasons, the Rule Change Panel agrees with Perth Energy that the costs of the suggested change outweigh the potential benefits at this time.

Additional issues with the late return of capacity to the Balancing Market

The Rule Change Panel considers that proposed section 7A.2A does not account for the following situations:

- If a slower-starting Balancing Facility is unsynchronised at the time of a late Planned Outage rejection, it may not be possible to make it available for service in the time frames contemplated by proposed clauses 7A.2.9B and 7A.2A.3.
 - If the Market Generator makes capacity available in its Balancing Submission for a Trading Interval in which it will not be available, and the capacity is then dispatched in merit (which is quite feasible in the circumstances), the Market Generator will be unable to comply with its Dispatch Instruction and therefore required to report a Forced Outage.

Figure 6.2 provides an example of this problem. As in Figure 6.1, System Management rejects a Planned Outage at 9:15 AM that is due to start at 11:00 AM. However, in this case the Balancing Facility is unsynchronised at 9:15 AM and has a 4-hour start-up time.

Under proposed clauses 7A.2.9B, 7A.2A.1 and 7A.2A.3, the Market Generator is expected to update its Balancing Submissions for the 12:00 PM Trading Interval and later Trading Intervals because the Planned Outage was rejected 30 minutes or more before Balancing Gate Closure for those Trading Intervals (e.g. the Balancing Gate Closure for the 12:00 PM Trading Interval is 10:00 AM, 45 minutes after the rejection). However, even if the Balancing Facility begins its start-up process immediately at



9:15 AM, it will not be ready to synchronise until 1:15 PM (i.e. it cannot be available for service until the 1:30 PM Trading Interval). Under the Rule Change Proposal drafting:

- o if the Market Generator fails to update its Balancing Submissions for the Trading Intervals in the period between 12:00 PM and 13:30 PM, it is required to report a Forced Outage under clause 7A.2A.1; and
- o if the Market Generator updates its Balancing Submissions for that period and is then dispatched in merit, it will be unable to comply with its Dispatch Instruction and will therefore be required to report a Forced Outage.

The Rule Change Panel does not consider it reasonable for a Market Generator to be exposed to such a risk through no fault of its own.

8:00 AM-Key 8:30 AM No requirement to update Balancing Submission. 9:00 AM-Best endeavours to update. Planned Outage rejected at 9:15 AM Must update or report Forced Outage. 9:30 AM Likely Forced Outage. Balancing Gate Closure for 12:00 PM -→ 10:00 AM -Updated Rule Change 10:30 AM -Proposal Proposal Start-up (4 hours) Planned Outage start time ➤ 11:00 AM -Balancing Gate Closure for 1:30 PM -→ 11:30 AM -12:00 PM-12:30 PM-1:00 PM-1:30 PM-2:00 PM-Available for service 2:30 PM -3:00 PM-3:30 PM-4:00 PM-

Figure 6.2: Late rejection of a Planned Outage - Balancing Facility with a 4-hour start-up time

System Management may need to reject or cancel a Consequential Outage or Commissioning Test Plan at a time that falls before gate closure but is still too late to return the capacity to the Balancing Market for one or more of the affected Trading Intervals (due to gate closure or start-up time limitations). Proposed clauses 7A.2A.1 and 7A.2A.2 would require the Market Generator to report a Forced Outage in this situation. Figure 6.3 provides an example of this problem. A Balancing Facility is undergoing a Consequential Outage and the Market Generator has declared its capacity as unavailable in its Balancing Submissions for the Trading Day. At 9:15 AM the Market Generator is notified that the associated network outage (and therefore the Consequential Outage) will end at 11:00 AM.²⁹ The Market Generator has a 4-hour start-up time.

Rule Change Updated Proposal Proposal 8:00 AM 7 8:30 AM Balancing Gate Closure for 11:00 AM Consequential Outage > 9:00 AM Consequential Outage updated at 9:15 AM-→ 9:30 AM Balancing Gate Closure for 11:30 AM -10:00 AM 10:30 AM -Start-up (4 hours) Updated Consequential Outage end time → 11:00 AM Balancing Gate Closure for 1:30 PM → 11:30 AM 12:00 PM-12:30 PM-Cancelled Consequential Outage 1:00 PM Key 1:30 PM No requirement to update Balancing Submission. Best endeavours to update. 2:00 PM Must update or report Forced Outage. Available for service 2:30 PM Likely Forced Outage 3:00 PM 3:30 PM-4:00 PM

Figure 6.3: Early termination of Consequential Outage

The Market Generator does not need to have updated its Balancing Submission for the 11:00 AM Trading Interval because the capacity was subject to an approved Consequential Outage for the Trading Interval at the time of Balancing Gate Closure (9:00 AM). However, if the Market Generator does not update its Balancing Submission for any of the remaining Trading Intervals in the Trading Day, then it will need to log a Forced Outage for those Trading Intervals, because at the time of Balancing Gate

The Rule Change Panel notes that this specific scenario is presented to illustrate the rule issue and is very unlikely to occur. The Rule Change Panel is considering the management of late changes affecting Consequential Outages as part of its assessment of RC_2014_03.



Closure for those Trading Intervals (e.g. 9:30 AM for the 11:30 AM Trading Interval) the Consequential Outage will no longer apply to them.

However, as in the example in Figure 6.2, the Balancing Facility cannot be available for service until the 1:30 PM Trading Interval, due to its 4-hour start-up time. This means that the Balancing Facility will be exposed to Forced Outages for the period between 11:30 AM and 1:30 PM, through no fault of its own.

Even if the Balancing Facility could synchronise within Balancing Gate Closure, the Market Generator may find it challenging to update its Balancing Submission for the 11:30 AM Trading Interval before its Balancing Gate Closure (9:30 AM).

 A Market Generator that withdraws an approved Planned Outage after the relevant gate closure time for one or more Trading Intervals in the outage period, can leave the capacity unavailable in its Balancing Submission(s) for the Trading Interval(s) without any obligation under proposed clauses 7A.2A.1 or 7A.2A.2 to report a Forced Outage.

Figure 6.4: Late withdrawal of a Planned Outage

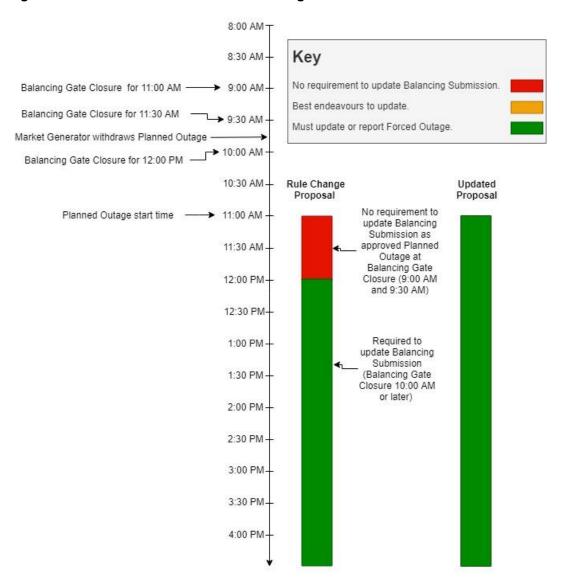


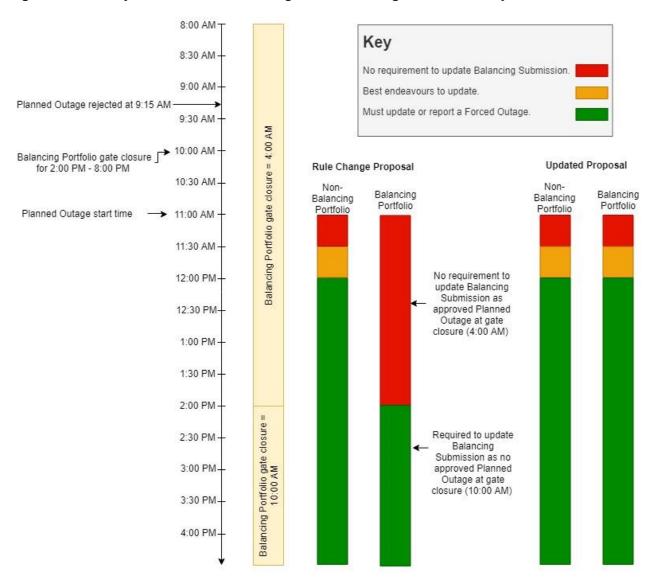
Figure 6.4 provides an example of this problem. In this example, a Market Generator cancels an approved Planned Outage at 9:45 AM that is due to start at 11:00 AM. The Market Generator has no requirement under clause 7A.2A.1 to update its Balancing Submissions for

the 11:00 AM and 11:30 AM Trading Intervals, because at the time of Balancing Gate Closure for these Trading Intervals (9:00 AM and 9:30 AM respectively) the capacity was still subject to a Planned Outage for those Trading Intervals. Note that the Market Generator is required to update its Balancing Submissions for the remaining Trading Intervals, because at the time of Balancing Gate Closure for those Trading Intervals (e.g. 10:00 AM for the 12:00 PM Trading Interval) those Trading Intervals are no longer subject to a Planned Outage.

System Management might reject a previously approved Planned Outage for a
Balancing Portfolio Facility between the clause 7A.2.9(d) gate closure time for an
affected Trading Interval and Balancing Gate Closure for that Trading Interval. If Synergy
can make the capacity available in its Balancing Submission under proposed clause
7A.2.9B but does not do so, it is not required to report a Forced Outage under proposed
clause 7A.2A.2.

Figure 6.5 provides an example of this problem. As in Figures 6.1 and 6.2, System Management rejects a Planned Outage at 9:15 AM that is due to start at 11:00 AM. However, in this case the Balancing Facility is a fast-starting Facility in the Balancing Portfolio.

Figure 6.5: Late rejection of a Planned Outage for a Balancing Portfolio Facility



Clause 7A.2.9B requires Synergy to update its Balancing Submissions for the same Trading Intervals as any other Market Generator. However, the consequences of Synergy failing to do so are different. This is because the tests in clause 7A.2A.2 are based on Synergy's default gate closure times (i.e. the latest time specified in clause 7A.2.9(d)"), which are 4:00 AM for Trading Intervals in the period from 8:00 AM to 2:00 PM, and 10:00 AM for Trading Intervals in the period from 2:00 PM to 8:00 PM.

At 4:00 AM, the Trading Intervals in the period between 11:00 AM and 2:00 PM are still subject to an approved Planned Outage, so Synergy has no obligation to report a Forced Outage for these Trading Intervals. Synergy is only obliged to report a Forced Outage for failing to update its Balancing Submissions for the 2:00 PM Trading Interval and later Trading Intervals (i.e. because the Planned Outage is rejected before the 10:00 AM gate closure time for these Trading Intervals).

To address these concerns, the Rule Change Panel proposes the following additional changes to the proposed Amending Rules:

- changes to proposed clauses 7A.2.9B and 7A.2A.3 to account for the delayed return to the Balancing Market of unsynchronised Balancing Facilities with longer start-up times;
- changes to proposed clauses 7A.2A.1 and 7A.2A.2 to base the tests in those clauses on the situation during the Trading Interval rather than at the relevant gate closure time;
- inclusion of new clause 7A.2A.4 to specify exemptions from clauses 7A.2A.1 and 7A.2A.2 for late cancellations/rejections of Commissioning Test Plans and Consequential Outages, which take the relevant gate closure and start-up time restrictions into account; and
- changes to proposed clause 7A.2A.3 to base the exemption on the Balancing Gate Closure time for a Trading Interval for all Facilities, including those in the Balancing Portfolio, to reflect the obligation under clause 7A.2.9B.

The changes would have the following effect:

- in the examples in Figures 6.2 and 6.3, the Market Generator would not need to update its Balancing Submissions for the Trading Intervals that start before 1:30 PM;
- in the example in Figure 6.4, the Market Generator would be required to report a Forced Outage for the 11:00 AM and 11:30 AM Trading Intervals; and
- in the example in Figure 6.5, Synergy would subject to the same obligations to update its Balancing Submissions as any other Market Generator.

The Rule Change Panel has not yet publicly consulted with stakeholders on these changes.

6.3.3 Timelines for Planned Outages

This Rule Change Proposal includes several changes that clarify the timing requirements for Planned Outage requests and improve flexibility by removing unnecessary timing restrictions on Opportunistic Maintenance requests.

6.3.3.1 Market Generators' alternative outage planning mechanism

While stakeholders generally agreed that the proposed outage planning changes would provide a material benefit, Alinta, Bluewaters, ERM Power and Synergy met with the IMO during the first submission period to propose an alternative outage planning mechanism. The Market Generators later provided several slightly different versions of this proposed alternative mechanism in their first period submissions on this Rule Change Proposal.



The common and central element of these alternative outage planning mechanisms was an allowance for longer Opportunistic Maintenance outages that could lead directly into a 'pre-accepted' Scheduled Outage, without any gap between the two outages. The Market Generators considered this would provide maximum flexibility when compared to the IMO's proposal, which they considered was overly focussed on preventing Market Generators from hiding Forced Outages.

The alternative mechanisms assume the use of a pre-accepted Scheduled Outage, an option no longer permitted by System Management because it does not comply with the Market Rules. The intent appears to be that the approval requests for the two outages are submitted at about the same time.

The Rule Change Panel considers that allowing an Opportunistic Maintenance outage to continue until a Scheduled Outage is approved and commences is effectively the same as reducing the deadline for a Scheduled Outage request to a few hours before the start of the outage. The Rule Change Panel acknowledges that this option allows Rule Participants greater flexibility, but also considers that it:

- significantly reduces the amount of notice provided to the market of longer Planned
 Outages, which reduces transparency and makes it more difficult, if not impossible, for
 other Rule Participants to respond in an efficient manner;
- reduces the incentive for Rule Participants to forward plan their outages and appropriately manage the balance between their maintenance costs and their market obligations; and
- increases the ability of Rule Participants to hide Forced Outages, by allowing Opportunistic Maintenance (which has a relatively short request/approval timeframe) to lead directly into a Scheduled Outage without any gap.

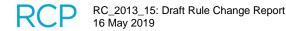
Bluewaters' submission suggested changing the deadline for Opportunistic Maintenance requests to six hours before the start of the outage, to address concerns about Market Generators using these requests to hide Forced Outages. The Rule Change Panel agrees this change would, in some circumstances, make it harder for Market Generators to hide a Forced Outage; but notes that it would not address the other problems listed above, and would reduce the time window for Opportunistic Maintenance requests (reducing flexibility).

Overall, the Rule Change Panel does not support the alternative mechanisms proposed by Alinta, Bluewaters, ERM Power and Synergy in their first period submissions, as it considers the disadvantages of the alternative mechanisms outweigh their potential flexibility benefits.

6.3.3.2 Clarification of deadline for Scheduled Outage approval requests (Issue 8)

This Rule Change Proposal proposes to amend clause 3.19.1 to clarify that approval of a Scheduled Outage must be requested no later than 10:00 AM on TD-2. While the Market Rules do not currently specify an exact deadline for these requests, the proposed deadline is consistent with current practice.

The first period submissions of Community Electricity, Perth Energy and Western Power supported the specification of this deadline in clause 3.19.1; as did attendees at the 17 September 2018 workshop. No concerns were raised in further submissions regarding the proposed deadline.



The Rule Change Panel supports the proposed amendment, because:

- 10:00 AM on TD-2 is an appropriate deadline for Scheduled Outage approval requests that is generally supported by stakeholders; and
- specifying the deadline in the Market Rules will provide greater clarity to Rule Participants on their outage scheduling obligations.

6.3.3.3 Prohibition on Opportunistic Maintenance Outages spanning two Trading Days (Issue 9)

This Rule Change Proposal proposes to amend clause 3.19.2 to allow Opportunistic Maintenance requests to be for any period up to 24 hours in length. The Rule Change Panel supports this amendment, as it agrees with the IMO that there is no reason to require an Opportunistic Maintenance outage to take place within a single Trading Day.

First period submissions generally supported the removal of the single Trading Day restriction, although (as discussed in section 6.3.3.1) some submitters considered the maximum outage period should be longer than 24 hours.

Stakeholders raised no concerns about the proposed change at the 17 September 2018 workshop or in further submissions.

6.3.3.4 Restrictions on the timeframes for making Opportunistic Maintenance requests (Issue 10)

Currently an Opportunistic Maintenance request cannot be made between 10:00 AM on the Scheduling Day and the start of the Trading Day. This Rule Change Proposal proposes to amend clause 3.19.2 to allow a Rule Participant to submit an Opportunistic Maintenance request at any time between:

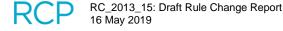
- the proposed deadline for Scheduled Outage approval requests (i.e. 10:00 AM on TD-2);
 and
- the proposed deadline for System Management's decisions on Opportunistic Maintenance requests (i.e. 30 minutes before Balancing Gate Closure for the Trading Interval in which the requested outage is due to commence).

The proposed change was generally supported in first period submissions and at the 17 September 2018 workshop. No concerns were raised about the proposed change in further submissions.

The Rule Change Panel supports the proposed amendments, as it agrees with the IMO that the current submission restrictions are unnecessary and removing them would improve the efficiency of the outage planning process.

6.3.3.5 Restrictions on the timeframes for making consecutive Opportunistic Maintenance requests (Issue 11)

This Rule Change Proposal proposes to amend clause 3.19.3A(b) to require a 24-hour period to elapse between the end of one Opportunistic Maintenance outage for an Equipment List Facility and the start of the next. The proposed requirement replaces the current requirement in clause 3.19.3A(b) that System Management must not approve Opportunistic Maintenance for an Equipment List Facility "on two consecutive Trading Days".



The proposed amendment was supported in some first period submissions, but opposed by the Market Generators who suggested the alternative outage planning mechanism discussed in section 6.3.3.1.

Stakeholders raised no concerns about the proposed requirement at the 17 September 2018 workshop or in further submissions. However, AEMO suggested that the obligation should be on the Rule Participant to ensure its Opportunistic Maintenance requests were compliant, rather than on System Management to reject non-compliant requests.

The Rule Change Panel supports the intent of the proposed amendment, because allowing Rule Participants to undertake multiple Opportunistic Maintenance outages consecutively or in rapid succession could cause similar problems to those identified in section 6.3.3.1.

However, the Rule Change Panel agrees with AEMO that it would be more practical and more consistent with the treatment of related requirements (such as the requirement that the duration of the outage does not exceed 24 hours) if the obligation was placed on the Rule Participant. The Rule Change Panel therefore proposes additional changes to remove the requirement from proposed clause 3.19.3A(b) and include it as an additional requirement on the Rule Participant in clause 3.19.2(b).

6.3.3.6 Notification timelines for Small Outage Facilities (Issue 12)

This Rule Change Proposal proposes to amend clause 3.18.2A to align the notification deadlines for Planned Outages of Small Outage Facilities with the approval request deadlines for Planned Outages of corresponding duration of Equipment List Facilities. The proposed amendments to clause 3.18.2A also clarify that a Market Participant must notify System Management if the timing of the outage changes or the outage is no longer required.

Community Electricity, Perth Energy and Bluewaters supported the proposed amendments in their first period submissions. Stakeholders raised no concerns about the amendments at the 17 September 2018 workshop or in further submissions.

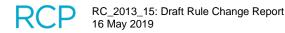
The Rule Change Panel also supports the proposed amendments, as it considers the current deadline for reporting these outages (not less than 2 Business Days prior to their commencement) is unnecessarily restrictive. The proposed deadlines will provide Market Participants with Small Outage Facilities greater flexibility in their outage planning, while ensuring that System Management is still provided with the relevant information by the time it would be needed to inform System Management's final assessment and approval of Planned Outage requests for Equipment List Facilities.

6.3.4 Criteria for Approval of Planned Outages

The Rule Change Panel supports the general intent of the changes proposed by the IMO to address Issue 13 of this Rule Change Proposal (Availability declarations for Planned Outage approval requests).

However, the Rule Change Panel has proposed some additional changes to the proposed Amending Rules, to address several issues that affect the proposed availability declaration arrangements. These issues are discussed in the remainder of this section 6.3.4, and include:

• three issues identified by the Rule Change Panel that, if not addressed, might prevent the availability declaration-related changes in this Rule Change Proposal from achieving their original intent (sections 6.3.4.1 to 6.3.4.3);



- three concerns raised by stakeholders about the proposed availability declaration requirements in first period submissions and in more recent discussions (sections 6.3.4.4 to 6.3.4.6);
- one additional issue identified by the Rule Change Panel regarding the need for additional safeguards against the abuse of the new availability declaration arrangements (section 6.3.4.7); and
- the question of the extent to which the availability declaration provisions should apply to Equipment List Facilities other than Scheduled Generators and Non-Scheduled Generators, and in particular to items of Network equipment (section 6.3.4.8).

6.3.4.1 Interpretation of 'removal from service'

Based on its interpretation of the Bluewaters decision, AEMO has advised stakeholders that for a Market Generator's Outage Plan or Opportunistic Maintenance request to be valid, and therefore capable of being approved, the Market Generator must have reasonable grounds to expect the Facility will be available for dispatch, or capable of being put into that state, immediately prior to the commencement of the proposed outage.

The current version of the PSOP: Facility Outages, which commenced on 7 January 2019, reflects this position.

To ensure its compliance with the Market Rules, System Management applies this test when:

- assessing Outage Plans under clause 3.18.11;
- reassessing Outage Plans under clause 3.18.13;
- approving Scheduled Outages or Opportunistic Maintenance requests; and
- deciding whether to reject previously approved Planned Outages after a change in power system conditions, as contemplated in clause 3.19.5.

The requirement for Facilities to always satisfy this test is inconsistent with the intent of this Rule Change Proposal to facilitate extensions of Scheduled Outages that overrun their original timeframe by relaxing the availability requirement for a Planned Outage that immediately follows a Scheduled Outage.

Additionally, the need to reapply the test after the approval of a Planned Outage if power system conditions change is inconsistent with the intent of this Rule Change Proposal to provide Rule Participants with as much certainty as possible that their Planned Outages will proceed, once approved.

The Rule Change Panel therefore proposes additional changes to proposed clauses 3.18.2A(b), 3.18.2A(f), 3.18.4A, 3.18.7, 3.18.8, 3.18.9 and 3.19.2A to remove any implication that an Outage Facility must be available for service immediately prior to the start of a Planned Outage.

The need to address this issue was discussed at the 7 November 2018 workshop, where attendees were generally supportive of the proposed clarifications. The proposed changes were also discussed in the CFFS. While the Rule Change Panel did not explicitly seek feedback on this specific issue, Alinta strongly supported the changes in its further submission.



6.3.4.2 Obligations to notify System Management of changes to Planned Outage Details

Currently, the Market Rules only require Rule Participants to update System Management about changes affecting a submitted Outage Plan in the following circumstances:

- where the Rule Participant no longer plans to remove from service, or de-rate, the relevant Facility or item of equipment for maintenance, it must inform System Management as soon as practicable (clause 3.18.8); and
- where the Rule Participant intends to remove from service, or de-rate, the relevant Facility or item of equipment for maintenance at a different time than indicated in the Outage Plan, it must submit a revised Outage Plan to System Management as soon as practicable (clause 3.18.9).

No update obligations of any kind are specified for Opportunistic Maintenance requests or reported Planned Outages of Small Outage Facilities.

This Rule Change Proposal proposes to mirror the existing update obligations for Planned Outages of Small Outage Facilities (in proposed clauses 3.18.2A(f) and 3.18.2A(g)), but does not propose any further obligations for either Equipment List Facilities or Small Outage Facilities.

The lack of an explicit requirement for Rule Participants to notify System Management of changes affecting their outage requests may compromise System Management's ability to manage the power system, for example if it does not have accurate information about the quantity of de-rating or recall time for a Planned Outage. The Rule Change Proposal in its current form may increase this problem by removing the requirement for Rule Participants to withdraw their outage requests in some situations.

The Rule Change Panel therefore proposes additional changes to place a clear obligation on Rule Participants to update their Planned Outage request details (or notification details for Small Outage Facilities) to reflect any relevant changes to the proposed Planned Outage. These include changes to proposed clauses 3.18.2A(g) and 3.18.9, and the inclusion of new clauses 3.19.2C and 3.19.2D. ³⁰

The Rule Change Panel also proposes additional changes to proposed clause 3.18.8 to explicitly require a Rule Participant that no longer wishes to undertake a Scheduled Outage to withdraw its Outage Plan, not just "inform System Management".

The proposed additional changes were discussed at the 7 November 2018 workshop and in the CFFS. Attendees at the workshop were generally supportive of the proposed changes, and no concerns were raised in further submissions.

6.3.4.3 Implications of Outage Plan changes

The Market Rules are unclear about when a revised Outage Plan should be treated as a new Outage Plan for the purposes of assessment and prioritisation.

Clause 3.18.14 specifies the criteria System Management must use when deciding which of multiple incompatible Outage Plans it should reject. Subject to the Outage Plan evaluation criteria in clause 3.18.11, clause 3.18.14(b) requires System Management to give priority to previously scheduled Outage Plans in the order in which they were entered in the outage schedule. For the purposes of this clause, an Outage Plan in the schedule that was revised in accordance with clause 3.18.9 (i.e. to specify a different time for the outage) is considered

Note that while the Rule Change Proposal included proposed clauses 3.19.2C and 3.19.2D, the Rule Change Panel has replaced proposed clause 3.19.2C with new clauses 3.18.8B (for Scheduled Outages) and 3.19.2F (for Opportunistic Maintenance), and renumbered proposed clause 3.19.2D to 3.19.2G.



to have been entered into the schedule on the date the most recent revision of the Outage Plan was submitted under that clause.

This means that, for the purposes of prioritisation, any changes to the proposed outage times in an Outage Plan will result in that Outage Plan losing its position in the implicit outage schedule queue, so it will effectively become a new Outage Plan. While this treatment may be appropriate for timing changes that shift the outage period outside of its existing boundaries, it appears unnecessary and inappropriate for changes that reduce the duration of the outage, while remaining within the existing outage period boundaries.

The Market Rules are silent on how changes to the details of an Opportunistic Maintenance request should affect its priority, consistent with the lack of any explicit requirement to report such changes to System Management.

The intent of this Rule Change Proposal is that the status of an approved outage request should not be affected by later changes that alter the relevant capacity's availability for dispatch. For this reason, it is necessary to clearly specify what types of revision to an outage request should be treated as the creation of a new outage request and so be subject to the same availability declaration requirements as other new outage requests.

Attendees at the 7 November 2018 workshop discussed a proposal to limit the changes that would effectively create a new outage request to:

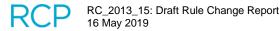
- changes to the timing of the outage that shift the outage period beyond its previous boundaries (i.e. so that the outage either starts earlier or ends later than previously); and
- a material increase in the quantity of de-rating.

In the CFFS, the Rule Change Panel sought feedback from stakeholders on what other changes to an outage request (in addition to the two listed above) should cause the request to be treated as a new request.

Stakeholders did not identify any other changes to an outage request that should be treated in this way at the 7 November 2018 workshop or in further submissions. However, stakeholders raised two concerns with the proposed changes:

- In its further submission, Alinta suggested that outage request changes should be considered as new outage requests only where they would affect AEMO's ability to maintain system adequacy. Alternatively, Alinta suggested that minor changes to previous boundaries (such as outage start and end times) may need to be allowed to avoid perverse consequences. The latter suggestion was similar to that proposed by Ms Ng of ERM Power at the 7 November 2018 workshop.
- In its further submission, Bluewaters noted that a quantitative measure of "material increase" would help to remove uncertainty surrounding changes to outage requests.

After further reflection, the Rule Change Panel considers that a change to the outage period or quantity of de-rating in an outage request would be 'material' in this context if it resulted in a scheduling conflict. However, scheduling conflicts may not manifest themselves until well after the submission of a revised outage request (e.g. if the Forced Outage of another Outage Facility causes a group of previously accepted Outage Plans to no longer be acceptable). This means that an obligation to determine the priority of outage requests using the materiality of prior changes to these parameters would require a continual reassessment process that would reduce certainty for Rule Participants and impose an impractical administrative burden on System Management.



The CFFS noted that minor changes to outage quantities might need to be allowed to avoid perverse consequences, for example where a major Scheduled Outage of a Market Generator loses its priority in the outage schedule because of a small change to its Maximum Sent Out Capacity after the acceptance of the Outage Plan. However, after further discussion with AEMO, the Rule Change Panel has concluded that the likelihood of such events is sufficiently low as to not warrant the issues that a requirement to determine the materiality of outage quantity increases would create.

The Rule Change Panel considers that the priority assigned to an Outage Plan in the outage schedule should only apply to the outage period and quantity of de-rating that was specified in that Outage Plan.

For example, the Rule Change Panel considers that a Market Generator with a Scheduled Outage for one outage period should not be able to extend that outage period at the expense of another Market Generator's Scheduled Outage (with an outage period that overlaps the proposed extension period), simply because System Management accepted the Outage Plan for the first Scheduled Outage before the Outage Plan for the second Scheduled Outage. In other words, the Market Generator should be required to 'join the queue' to take a Scheduled Outage during the extension period, to avoid perverse and inequitable outcomes.³¹

The Rule Change Panel therefore proposes additional changes to proposed clause 3.18.9 and the inclusion of new clause 3.18.9A to clarify that a revised Outage Plan will be deemed a new Outage Plan if the revisions include:

- a new start time for the proposed outage that is earlier than the previous proposed start time;
- a new end time for the proposed outage that is later than the previous proposed end time; or
- any increase in the quantity of de-rating.

The Rule Change Panel proposes new clauses 3.18.2A(h) and 3.19.2E to provide a similar clarification for notifications for Small Outage Facilities and Opportunistic Maintenance requests. The proposed criteria vary from those discussed in the CFFS in that they include all increases in quantities of de-rating, not just 'material' increases.

The Rule Change Panel also proposes to remove the second sentence from clause 3.18.14(b),³² because new clause 3.18.9A will specify which revisions to an Outage Plan should constitute a new Outage Plan.

6.3.4.4 Nature of the availability declaration requirement

Proposed clause 3.19.2B specifies that:

a Market Participant must not request approval of a proposed Planned Outage for a Scheduled Generator or Non-Scheduled Generator under clauses 3.19.1 or 3.19.2 if the Market Generator does not expect in good faith that, if System Management rejected the request, the capacity to which the request applies would be available for dispatch for the duration of the proposed Planned Outage.

[&]quot;For the purposes of this clause an Outage Plan which has been entered into the outage schedule and has subsequently been revised in accordance with clause 3.18.9 is considered to have been entered into the schedule on the date the most recent revision of the Outage Plan was submitted under that clause."



³¹ The Rule Change Panel notes that System Management may override the outage schedule queue at any time, if this is necessary to maintain power system security and reliability.

Several Market Generators have expressed concerns that the proposed obligation may be too onerous and lead to perverse outcomes.³³ This is because:

- it may be impractical for a Market Generator to make a good faith declaration that its Facility will meet the availability requirement for a period that may be months or even years in advance; and
- a Market Generator that seeks a Planned Outage to investigate a potential issue and, if
 necessary, to take corrective action, is acting efficiently and to the benefit of the market
 but may not be able to make the proposed availability declaration because of the
 possibility that the issue may be serious enough to cause a Forced Outage if left
 unattended.

To mitigate these concerns, the Rule Change Panel proposes to change the availability declaration requirement in clause 3.19.2B to require that a Market Generator must not request approval if:

it is aware or ought to be aware in the circumstances that, if System Management rejected the request, any of the capacity or capability to which the request applies would be unavailable for service for any part of the relevant outage period.

The revised wording removes the requirement for a Market Generator not to request approval of a proposed Planned Outage based on its 'expectation'; and replaces it with a requirement not to request approval based on its 'knowledge' of a circumstance.

The Rule Change Panel also proposes additional changes to proposed clause 3.18.2A, to align the requirement for Small Outage Facilities and move it from clause 3.18.2A(h) to 3.18.2A(b).

The proposed drafting of the requirement includes several refinements to the version presented at the 7 November 2018 workshop and in the CFFS.³⁴ These include:

- or ought to be aware in the circumstances: this has been included to address concerns
 with 'wilful blindness' (i.e. disingenuous claims by a Market Generator that it was
 unaware its proposed Planned Outage could not meet the availability requirement). The
 intent is that a Market Generator could still be determined to have not complied with the
 requirement, if it could be clearly demonstrated that the Market Generator ought to have
 been aware in the circumstances (e.g. given an overt scenario like an explosion).
- <u>capacity or capability</u>: the words 'or capability' have been added at AEMO's suggestion
 to reflect that some Equipment List Facilities (including network equipment and providers
 of Ancillary Services under Ancillary Service Contracts) provide services that are not
 'capacity' in the RCM sense.
- <u>unavailable for service</u>: this term has replaced the term 'unavailable for dispatch' for two reasons:
 - o to reflect that the services provided by Equipment List Facilities are not all centrally 'dispatched' through a mechanism like the Balancing Market; and
 - to help distinguish between Balancing Facility capacity that is unavailable for service (i.e. physically unable to respond to a System Management direction in an

^{34 &}quot;...if it is aware that, if AEMO was to reject the request, the capacity to which the request applies would not be available for dispatch for the full duration of the proposed Planned Outage".



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Most recently during the workshop held by AEMO on 26 June 2018 to discuss outage issues.

emergency), and Balancing Facility capacity that is declared as unavailable in a Balancing Submission for a Trading Interval.³⁵

• <u>any of the capacity or capability...for any part of the relevant outage period</u>: these expressions replace the expression "for the full duration of the proposed Planned Outage". This is to avoid any ambiguity around partial Planned Outages and situations where the relevant capacity or capability would be unavailable for some part of the outage period (e.g. where a Facility could operate for the first few hours of the outage period but not for the full outage period).

The Rule Change Panel considers the amended obligation:

- should provide a simpler test that makes it easier for Market Generators to ensure their compliance with the Market Rules; and
- does not prevent a Market Generator from taking a Planned Outage to investigate a
 potential issue with their Outage Facility.

Attendees at the 7 November 2018 workshop were generally supportive of the proposed change to the availability declaration requirement, and agreed it would be easier to apply than the one proposed in this Rule Change Proposal. The further submissions (excluding Synergy's submission as discussed below) also generally supported the proposed change.

Synergy's availability declaration requirement issue

Synergy raised a new, more general issue with the proposed availability declaration requirement in its further submission:

"Synergy considers prohibiting a generator from requesting a Planned Outage when the Facility will be unavailable for dispatch for the duration of the Planned Outage, rather than immediately prior to its commencement, could inhibit a Market Generator from maximising the availability of its Facilities, leading to inefficient outcomes. Synergy's concern is how this rule will apply to situations where outages are required for maintenance or tests that occur at set times or after equipment has operated for a certain number of operating hours (e.g. tests required under environmental licensing or under original equipment manufacturers requirements).

Synergy considers that to maximise availability, Market Generators are likely to request Planned Outages to commence just prior to when these types of maintenance are required, such that the proposed outage period includes the period when this maintenance is required to be performed. As maintenance needs to be performed on the Facility during the Planned Outage, and theoretically, the Facility would not be able to operate without this maintenance, the Facility would not be available for the "duration" of the proposed outage.

Synergy considers that consequently, proposed clause 3.19.2B could prevent the Market Generator from requesting a Planned Outage at the most efficient time and cause it to be brought forward such that there is no overlap between the Planned Outage period and the set time when maintenance is required. This could reduce the availability of the Facility and negatively affect the economic efficiency of the WEM."

The Rule Change Panel agrees that a Market Generator will often have a preferred or 'ideal' outage period for the types of routine maintenance described by Synergy, and notes that taking outages at these times will help to reduce a Market Generator's long-term

As discussed in section 6.3.2.5 of this report, the declaration of capacity (and in particular capacity not subject to Capacity Credits) as unavailable for dispatch in a Balancing Submission does not mean it is necessarily unavailable for service.



maintenance costs. However, such maintenance may not occur during the ideal outage period for several reasons. For example:

- if a Market Generator requests a Planned Outage months or years in advance to increase the likelihood of its approval, it will often need to use a conservative estimate of when the relevant trigger for the maintenance (e.g. the requisite number of operating hours or starts) will be reached;
- the forecast ideal outage period may be a period of high energy prices and the Market Generator might consider it preferable to undertake the outage when lower energy prices are expected; and
- most importantly for this Rule Change Proposal, System Management may be unable to approve a Planned Outage for the ideal outage period.

Market Generators can never be sure that they will be able to take a Planned Outage at the time of their choice. This means that while a Market Generator might request a Planned Outage for its ideal outage period, it needs to ensure it has fallback options, which could involve taking the outage either later (if delay is permitted and the risk of delay is acceptable) or earlier.

A Market Generator that delayed requesting a Planned Outage until no alternative outage period was possible would not be meeting either its reliability obligations or its own best interests. For this reason, the Rule Change Panel considers that the proposed availability declaration requirement is consistent with what should already be normal good practice for a Market Generator planning this type of maintenance.

However, if an Outage Plan is able to be scheduled for the 'ideal' outage period (i.e. the latest possible time to meet a maintenance obligation) then at some subsequent point in time it will become too late to request a Planned Outage for an earlier outage period. The Rule Change Panel considers that it would be inefficient to then reclassify the outage as failing to meet the availability requirement and, as discussed in section 6.3.4.7 of this report, proposes an additional change to the proposed Amending Rules to prevent this outcome.

System Management Obligations

Proposed clause 3.19.3B allows System Management to decline to approve a Scheduled Outage or Opportunistic Maintenance for an Equipment List Facility where it considers that the proposed Planned Outage does not meet the availability requirement. The Rule Change Panel proposes to amend proposed clause 3.19.3B to oblige (rather than just allow) System Management to not approve a request for approval of Opportunistic Maintenance³⁶ if it is aware or ought to be aware in the circumstances that any of the capacity or capability to which the request applies would be unavailable for service for any part of the proposed outage period.

The Rule Change Panel, in the CFFS, sought the views of stakeholders on whether System Management should be obliged, rather than just allowed, to reject a request in these circumstances. While Bluewaters supported a firm obligation, AEMO's preference was not to be obliged to reject the outage request in this situation, as "in most circumstances AEMO does not have the means to accurately assess (without assistance from the Market Participant) whether a generator is available".

Note the Rule Change Panel intends that this clause only apply to requests for approval of Opportunistic Maintenance, as discussed in section 6.3.4.5 of this report.



However, the Rule Change Panel notes that an obligation is only placed on System Management in circumstances where it is or becomes aware (i.e. has knowledge) that any of the capacity or capability to which the request applies would be unavailable for service for any part of the proposed outage period. There is no requirement for System Management to proactively investigate every situation.

The Rule Change Panel sought clarification from AEMO regarding its concerns about this obligation; but to date has not identified any scenarios in which System Management is aware (or ought to be aware in the circumstances) that an outage request does not meet the availability requirement but should not be obliged to reject that outage request. However, the Rule Change Panel will continue to work with AEMO during the second submission period to understand its concerns.

The Rule Change Panel also notes that the proposed Amending Rules do not place any obligation on the ERA to proactively determine, for each Planned Outage, whether the participant is compliant with the availability declaration requirement. To determine non-compliance in practice, the ERA (or Electricity Review Board) would need evidence that the participant possessed information that ought to have made the participant aware that its outage request did not meet the availability requirement.³⁷

6.3.4.5 Availability declaration timeframes

In this Rule Change Proposal, the IMO proposed that once a Planned Outage is approved, it should not need to be withdrawn or rejected because it ceases to meet the relevant availability requirement.

For example, if a Scheduled Generator with an approved Planned Outage experiences a Forced Outage, and the repairs cannot be completed until after the start of the proposed Planned Outage period, then:

- the Planned Outage will not be rejected for that reason; and
- the Market Generator will not be liable for Capacity Cost Refunds during the Planned
 Outage period (although it may be liable for Capacity Cost Refunds before and/or after
 that outage period).

During a workshop held by AEMO on 26 June 2018 to discuss outage issues, some Market Generators raised concerns that the potential late approval of Scheduled Outages³⁸ could lead to inefficient outcomes. For example, a Market Generator with a major Scheduled Outage, that was requested many months in advance, might have that outage rejected only days before its scheduled start due to the occurrence of a relatively minor Forced Outage that will affect the availability of the Facility beyond the start of the Planned Outage period. The late rejection of the Planned Outage would typically oblige the Market Generator to amend its plans and seek to return to service as soon as possible to avoid further Capacity Cost Refunds. This is unlikely to be an efficient outcome and would provide little or no benefit to the market.

The Rule Change Panel proposes additional changes to the proposed Amending Rules to ensure that once an Outage Plan is accepted and included in System Management's outage schedule, the Scheduled Outage no longer needs to be withdrawn or rejected because the

³⁸ At the time AEMO was proposing to delay the approval of all Scheduled Outages until two days before their commencement.



This is true for both the original availability declaration requirement in the Rule Change Proposal and the revised version proposed by the Rule Change Panel.

Market Generator ceases to meet the applicable availability declaration requirement.³⁹ The changes include:

- new clause 3.18.5D, which applies the proposed availability declaration requirement to the submission of an Outage Plan;
- new clause 3.18.9B, which requires the withdrawal (under clause 3.18.9B(b)(ii)) of an Outage Plan that has not yet been scheduled by System Management if the Market Generator can no longer meet the availability declaration requirement;
- new clause 3.18.10A, which obliges System Management not to schedule a new Outage Plan in its Outage Schedule if it is aware or ought to be aware in the circumstances that the proposed Scheduled Outage does not satisfy the availability requirement;
- amendments to proposed clause 3.19.2B to restrict the clause to requests for approval of Opportunistic Maintenance; and
- replacement of proposed clause 3.19.2C with new clause 3.19.2F, which requires the withdrawal (under clause 3.19.2F(b)(ii)) of an Opportunistic Maintenance request that has not yet been approved by System Management if the Market Generator can no longer meet the availability declaration requirement.

New clauses 3.18.5D, 3.18.9B, 3.18.10A and 3.19.2F (as well as revised clauses 3.19.2B, 3.18.2A(b)(ii) and 3.19.3B) are all subject to clause 3.19.2G (renumbered from 3.19.2D), which specifies the exception cases to which the availability requirement does not apply.

The Rule Change Panel considers these changes:

- may prevent the inefficiencies that can result from the late rejection of a large Scheduled Outage; and
- provide a strong incentive for Market Generators to submit their Outage Plans as early as possible, which would provide greater transparency to AEMO and other Rule Participants and support more efficient outage planning and coordination.

Attendees at the 7 November 2018 workshop discussed and generally supported the proposed changes. AEMO and Alinta also supported the changes in their further submissions. However, Bluewaters' further submission only supported the change if Bluewaters' suggestion to impose specific time period limits for decisions on Scheduled Outage approval requests was not adopted.⁴⁰

6.3.4.6 Ability to start work on a Scheduled Outage early

This Rule Change Proposal proposes to relax the normal availability requirement for a Planned Outage that immediately follows a Scheduled Outage.⁴¹ This is intended to allow a Market Participant to seek what is effectively an extension to its Scheduled Outage (subject to standard outage request timeframes) if its maintenance work has taken longer than expected and the relevant capacity might not be otherwise available for dispatch by the end of the Scheduled Outage.

Occasionally a Market Participant may be able to start a Scheduled Outage early, if the Facility is not needed for dispatch and the required equipment and personnel are available. However, the proposed Amending Rules may not allow a Market Participant to use an

The Scheduled Outage could, of course, be rejected by AEMO for other reasons under the Market Rules.



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Of course, AEMO could reject the Scheduled Outage for other reasons under the Market Rules.

⁴⁰ The Rule Change Panel does not propose to adopt this suggestion, as discussed in section 6.3.2.2 of this report.

Opportunistic Maintenance outage to commence a Scheduled Outage a day earlier than originally planned. This is because:

- if AEMO rejected the Scheduled Outage after work commenced on the Opportunistic Maintenance outage, then it would be likely that the relevant capacity would not be available for dispatch; and
- the exemption from the availability declaration requirement only applies to Planned Outages that follow Scheduled Outages.

The Rule Change Panel proposes an additional change to proposed clause 3.19.2D(a) (renumbered to clause 3.19.2G(a)), to extend the proposed exemption from the availability requirement to apply to Planned Outages that immediately follow any Planned Outage of the relevant capacity, not just a Scheduled Outage. This would provide Market Participants with additional flexibility by allowing them to begin their Scheduled Outages up to a day earlier than originally proposed where this is a more efficient option.

Attendees at the 7 November 2018 workshop discussed and generally supported this change. AEMO, Alinta and Bluewaters also supported the change in their further submissions.

6.3.4.7 Prevention of disingenuous Planned Outage requests

The Rule Change Panel considers that the changes proposed in this Rule Change Proposal could, in some circumstances, allow a Market Generator to request a Planned Outage and avoid Capacity Cost Refunds in a way that is contrary to the intent of the Rule Change Proposal. The additional changes proposed in sections 6.3.4.4 and 6.3.4.5 may further increase the potential for these requests. For example:

- if a Scheduled Generator was to trip just before the start of an approved Planned Outage and fixing the issue that caused the trip takes longer than the duration of the Planned Outage, the Market Generator would be able to request additional 'extension' Planned Outages that were exempt from the normal availability requirements; or
- under the modified availability declaration requirement proposed in section 6.3.4.4, a
 Market Generator could request a Planned Outage for capacity on a Forced Outage on
 the basis that it considers the relevant capacity *might* be able to be returned to service
 by the start of the proposed Planned Outage, even if this is extremely unlikely.

Permitting Planned Outages under these circumstances may allow a Market Generator to submit disingenuous outage requests that compromise the integrity of the RCM and reduce the incentive for Market Generators to avoid Forced Outages by undertaking prudent preventative maintenance.

The Rule Change Panel therefore proposes the following additional changes to the proposed Amending Rules, to prevent the acceptance (for Scheduled Outages) or approval (for Opportunistic Maintenance) of disingenuous outage requests where it is likely that the relevant capacity will be unavailable for dispatch if the request is rejected.

• <u>Obligations to notify AEMO of changes to availability status</u>: new clause 3.18.9B specifies the actions that a Rule Participant⁴² must take if it becomes aware that its proposed Scheduled Outage no longer meets the availability requirement.

The Rule Change Panel proposes to apply these provisions to all Rule Participants with Equipment List Facilities, not just Market Generators, as discussed in section 6.3.4.8 of this report.



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- Clause 3.18.9B(a) gives the Rule Participant an option to meet the availability declaration requirement by submitting a revised Outage Plan to amend the outage period and/or reduce the quantity of de-rating.
- Clause 3.18.9B(b) requires the Rule Participant, if it does not take the option in clause 3.18.9B(a), to as soon as practicable:
 - notify System Management; and
 - withdraw the Outage Plan if it has not yet been accepted.

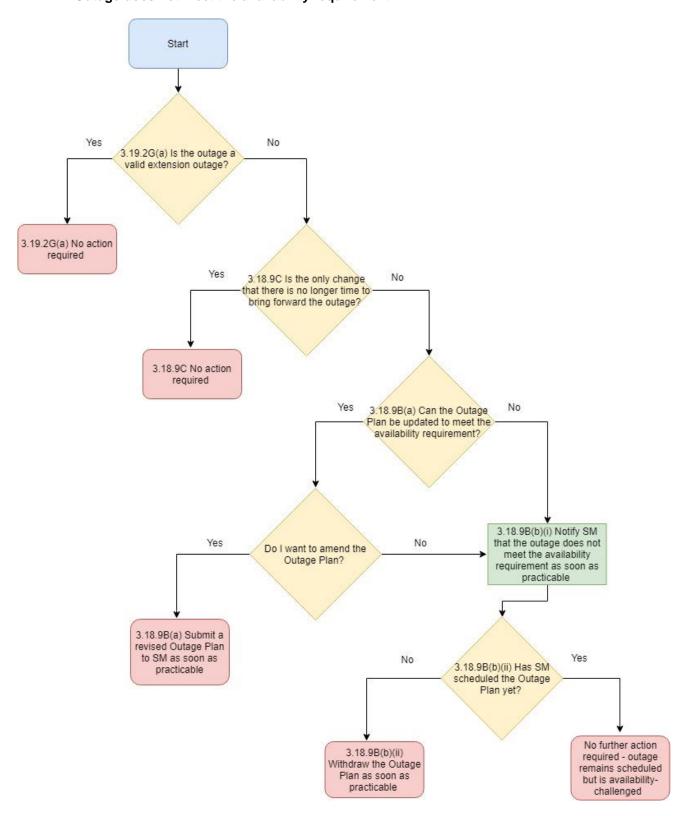
While an accepted Outage Plan does not need to be withdrawn or rejected, AEMO must still be notified that the outage no longer meets the availability requirement.

As discussed in section 6.3.4.4 of this report, if an Outage Plan is scheduled for an outage period that falls as late as possible to meet the relevant maintenance obligation, then at some subsequent point in time it will become too late to reschedule the outage for an earlier period. To avoid perverse outcomes, new clause 3.18.9C exempts a Rule Participant from having to comply with clause 3.18.9B when this occurs.

Figure 6.6 provides a graphical overview of the options available to a Rule Participant that becomes aware its proposed Scheduled Outage does not meet the availability requirement.

New clause 3.19.2F (which replaces proposed clause 3.19.2C) specifies the corresponding actions that a Rule Participant must take if it becomes aware that its proposed Opportunistic Maintenance outage no longer meets the availability requirement.

Figure 6.6: Options for a Rule Participant that becomes aware that its proposed Scheduled Outage does not meet the availability requirement



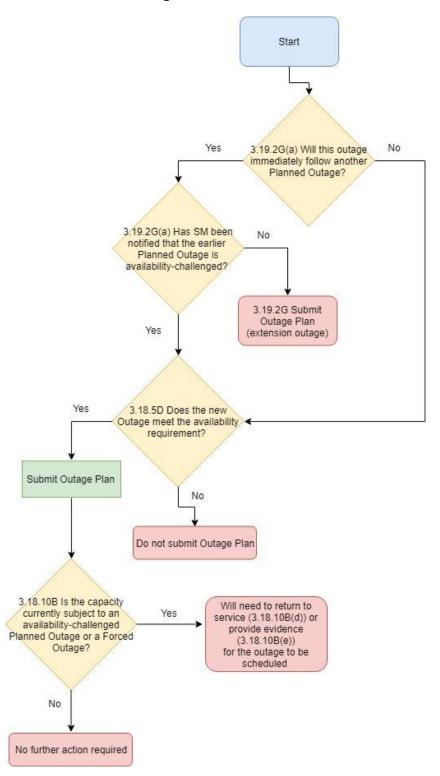
- Refinement of the extension provisions: the Rule Change Panel proposes additional changes to clause 3.19.2D(a) (renumbered to clause 3.19.2G(a)), to make a proposed Planned Outage, that will immediately follow a Planned Outage that System Management knows does not meet the availability requirement (from a notification received under clauses 3.18.9B(b)(i) or 3.19.2F(b)(i)), ineligible for the exemption from the availability requirement in clause 3.19.2G(a).
- <u>Additional requirements for Scheduled Outages:</u> new clause 3.18.10B requires System Management to delay the evaluation of a new Outage Plan for capacity that is subject to either a Planned Outage that has been flagged as not meeting the availability requirement or a Forced Outage until certain conditions are met. Specifically, if at the time System Management begins its evaluation of the Outage Plan:
 - the capacity is subject to a Planned Outage that System Management has been notified does not meet the availability requirement (under new clauses 3.18.9B(b)(i) or 3.19.2F(b)(i)); or
 - the capacity is subject to a Planned Outage, and System Management is otherwise aware that it should have received a notification for that outage under new clauses 3.18.9B(b)(i) or 3.19.2F(b)(i); or
 - the capacity is subject to a Forced Outage,

then System Management must delay its evaluation of the Outage Plan until either:

- o the relevant capacity becomes available for service; or
- System Management receives evidence to its satisfaction from the Rule Participant that the capacity would be capable of being made available for service before the start of the proposed outage period.

Figure 6.7 provides a graphical overview of how these arrangements apply to a Rule Participant wishing to undertake maintenance under a Scheduled Outage, while Figure 6.8 sets out the process to be used by System Management to decide whether it can proceed with the evaluation of a new Outage Plan.

Figure 6.7: Considerations for a Rule Participant that wants to undertake maintenance under a Scheduled Outage



Start No Yes 3.19.2G(a) Does the outage Immediately follow another Planned Outage? Has SM been told that the Yes earlier outage is availabilitychallenged? 3,18,10A Is SM aware that Yes the Outage Plan does not meet the availability No requirement? 3.18.10A SM must not 3.19.2G(a) SM can proceed with schedule the Outage Plan. evaluation (extension outage). No 3.18.10B(a) Is the capacity currently subject to Planned Yes No Outage that SM has been Is there time left to evaluate Outage Plan lapses told is availabilitythe Outage Plan? challenged? No Yes 3.18.10B(b) Is the capacity currently subject to Planned Yes 3.18.10B(d) Has the capacity Outage that SM knows it should have been told was returned to service? availability-challenged? SM can proceed with evaluation of Outage No Plan. No 3.18.10B(e) Is there Yes evidence that the capacity Yes SM can proceed with No 3.18.10B(c) Is the capacity could return to service before currently subject to a Forced evaluation of Outage the start of the outage? Outage? No

Figure 6.8: Considerations for System Management on whether to evaluate an Outage Plan

• <u>Additional requirements for Opportunistic Maintenance:</u> new clause 3.19.3C specifies the corresponding obligations for Opportunistic Maintenance.

Attendees at the 7 November 2018 workshop discussed and generally supported the proposed changes, although some attendees raised questions about the kind of evidence System Management might require from Market Generators in these circumstances.

The proposed changes were also discussed in the CFFS, which sought feedback from stakeholders on two questions:

- whether the changes provide an appropriate and sufficient safeguard against disingenuous Planned Outage requests where it is likely that the relevant capacity will be unavailable for service if the request is rejected; and
- what principles or guidelines, if any, should be included in the Market Rules to guide System Management's assessment of evidence that capacity would be able to be made available for service prior to the start of a requested Planned Outage.

The further submissions were generally supportive of the proposed changes, although some stakeholders noted a need to review the drafting of the proposed changes.

In relation to the second question, AEMO preferred that the relevant evidence requirements be detailed in a Market Procedure, but was comfortable for the Market Rules to provide guiding principles. Bluewaters' submission noted the importance of transparency in System Management's assessment process, but no stakeholders provided any suggestions for specific principles or guidelines.

The Rule Change Panel does not propose to include any specific principles or guidelines in the Market Rules around System Management's assessment of evidence under new clauses 3.18.10B and 3.19.3C because a requirement for the inclusion of such principles or guidelines has not been demonstrated. It is expected that further details of this new component of the outage planning process will be included in the PSOP: Facility Outages under clauses 3.18.21 and 3.19.14.

The Rule Change Panel notes that the option in new clauses 3.18.9B(a) and 3.19.2F(a) was not in the straw man proposal discussed at the 7 November 2018 workshop or the CFFS. The Rule Change Panel considers that this option may provide greater flexibility to Rule Participants in the following situations:

- If a Rule Participant suffers a Forced Outage that might prevent the acceptance of its Outage Plan, the Rule Participant may choose to delay the start of the proposed Scheduled Outage by a short period. ⁴³ The delay might be used to prevent the Outage Plan from 'timing out', and allow the Rule Participant to undertake repairs and/or prepare evidence for System Management that would allow the Outage Plan to be accepted.
- If a Rule Participant suffers a Forced Outage that would require the Rule Participant to notify System Management that a major upcoming (already) Scheduled Outage no longer met the availability requirement, the Rule Participant may choose to delay the start of the Scheduled Outage by a short period. The delay would allow the Rule Participant time to undertake sufficient repairs to prevent the need to send a notification to System Management under clause 3.18.9B(b)(i), as the notification could jeopardise the Rule Participant's ability to seek an extension if its major outage runs over time.

The Rule Participant could also delay the end time to keep the outage period the same length, although this would cause the Outage Plan to be treated as a new Outage Plan under proposed clause 3.18.9A.



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 If a Rule Participant suffers a partial Forced Outage that might prevent the acceptance of an Outage Plan, the Rule Participant may need to reduce the quantity of de-rating in the Outage Plan to account for the partial Forced Outage.

The Rule Change Panel also notes that the proposed Amending Rules might encourage the submission of outage requests for unrealistically short outage periods. During the 7 November 2018 workshop, there was some discussion about a scenario in which:

- a Rule Participant needs a lengthy outage (e.g. 4 weeks) for corrective maintenance on its Equipment List Facility;
- the Rule Participant is aware that the Equipment List Facility would satisfy the availability declaration requirement for only the first part of the proposed outage period (e.g. the first 2 days); and
- the Rule Participant evades the availability declaration requirement for the 4-week outage by requesting a Scheduled Outage for the first 2 days (that meets the availability declaration requirement), and then requesting an extension outage, which is exempt from the availability declaration requirement, for the remaining period.

The Rule Change Panel considers that if a Rule Participant becomes aware of a problem that needs more time to address during a Planned Outage, it should be able to seek an extension outage (that is not subject to the availability declaration requirement) to complete the required work.

However, to prevent deliberate abuse of this flexibility, the Rule Change Panel proposes to include new clause 3.18.6A, which prohibits a Rule Participant from submitting an Outage Plan if it is aware (or ought to have been aware in the circumstances) that it will not be possible to complete the proposed maintenance by the end of the proposed outage period.

6.3.4.8 Application of availability declaration requirements to non-generator Equipment List Facilities

Most of the provisions in this Rule Change Proposal that relate to availability requirements for Planned Outages apply only to outages of Scheduled Generators and Non-Scheduled Generators. However, the Rule Change Panel considers that the proposed obligations are also appropriate for other Equipment List Facilities, such as items of network equipment and Facilities that provide services under Ancillary Services Contracts. The Rule Change Panel considers that extension of the provisions to non-generator Equipment List Facilities would promote better outcomes in terms of improved transparency, efficiency and reliability, even though these Equipment List Facilities are not subject to the same RCM considerations as Scheduled Generators and Non-Scheduled Generators.

The Rule Change Panel therefore proposes additional changes to proposed clauses 3.19.2A, 3.19.2B, 3.19.2D (renumbered to 3.19.2G) and 3.19.3B to ensure that these clauses apply to all Equipment List Facilities. The Rule Change Panel has also drafted new clauses 3.18.5D, 3.18.9B, 3.18.10A, 3.18.10B, 3.19.2C, 3.19.2D, 3.19.2E, 3.19.2F and 3.19.3C to apply to all Equipment List Facilities.

At the 7 November 2018 workshop, there was general agreement that the proposed availability requirements could also be applied to non-generator Equipment List Facilities, provided that a suitable alternative to the term 'available for dispatch' was used for these Equipment List Facilities.

The Rule Change Panel sought feedback on the question in the CFFS. Further submissions raised no concerns about the extension of the provisions to all Equipment List Facilities, with Bluewaters expressing explicit support for the change.

6.3.5 Other Issues

This Rule Change Proposal includes a number of minor amendments to improve the clarity and integrity of the Market Rules. The Rule Change Panel's assessment of the proposed minor amendments is summarised below.

Proposed Amendment	The Rule Change Panel's Assessment
Create defined terms in the Glossary for Equipment List, Equipment List Facility, Small Outage Facility and Outage Facility.	The Rule Change Panel supports the creation of defined terms for these concepts to provide clarity and reduce unnecessary repetition in the drafting; but, as discussed in section 6.4.1.2 of this report, proposes to replace the name 'Small Outage Facility' with 'Self-Scheduling Outage Facility'.
Amend clause 3.18.2(c) to replace two cross-references to clause 3.18.2A with their substantive meaning, i.e. that the generation systems in question must have a nameplate capacity of at least 10 MW.	The Rule Change Panel supports the proposed clarification of clause 3.18.2(c).
Remove clause 3.18.5D, which allows System Management to provide a Network Operator with the Scheduled Outage information of a Market Participant's Facility, on the basis that it is no longer required because Planned Outages by Facility are public information under clause 10.5.1(zD).	The Rule Change Panel notes that clause 10.5.1(zD) was deleted on 1 October 2013 by the Rule Change Proposal: Transparency of Outage Information (RC_2012_11). However, the Rule Change Panel considers that clause 3.18.5D is still not required because:
	Outage Plan information is classified as Public in the current confidentiality status list published by AEMO; and
	RC_2012_11 also implemented a requirement for the publication of near real-time outage information for Scheduled Generators and Non-Scheduled Generators on the Market Web Site.
	As discussed in section 6.3.4.5 of this report, the Rule Change Panel proposes to re-use the clause number (3.18.5D) for the obligation on Rule Participants to not submit an Outage Plan if they are unable to meet the availability declaration requirement.

Proposed Amendment	The Rule Change Panel's Assessment
Amend clause 3.18.4 to clarify which Outage Plans are to be considered Scheduled Outages and included in System Management's Outage Schedule.	The Rule Change Panel supports the proposed clarification of clause 3.18.4.
Several other minor and typographical changes to improve the clarity and integrity of the drafting.	The Rule Change Panel generally supports the proposed changes; but notes that it has proposed some additional minor and typographical changes, as discussed in section 6.5 of this report.

6.4 Additional Related Issues Identified by the Rule Change Panel

This section discusses several additional changes proposed by the Rule Change Panel to address new but related issues identified during the Rule Change Panel's assessment of this Rule Change Proposal. The section is structured as follows:

- section 6.4.1 discusses additional issues relating to obligations to participate in the outage planning process;
- section 6.4.2 discusses additional issues relating to requirements for Opportunistic Maintenance requests;
- section 6.4.3 discusses proposed clarifications of several central outage planning concepts; and
- section 6.4.4 discusses several minor additional issues.

6.4.1 Obligations to Participate in the Outage Planning Process

As discussed in section 4.1.1 of this report, the IMO proposed three changes to refine and clarify the obligations of Rule Participants to participate in the outage planning process. During its assessment of these changes, the Rule Change Panel identified three additional, related issues:

- what outage scheduling obligations should apply to small Scheduled Generators that hold Capacity Credits;
- what outage scheduling obligations should apply to larger generation systems that are not included on the Equipment List; and
- whether a materiality threshold should apply to the requirements to request or report Non-Scheduled Generator outages.

6.4.1.1 Obligations for small Scheduled Generators with Capacity Credits

Proposed clause 3.18.2(c)(ii) requires all Scheduled Generators and Non-Scheduled Generators with Capacity Credits and a nameplate capacity of at least 10 MW to be included on the Equipment List. Smaller Scheduled Generators and Non-Scheduled Generators are classified as Small Outage Facilities under proposed clause 3.18.2A(a), unless System Management determines under proposed clause 3.18.2(c)(v) that they must be included on the Equipment List and made subject to outage scheduling to maintain power system security and reliability.



Proposed clause 3.18.2(c) does not require the inclusion of smaller Scheduled Generators holding Capacity Credits on the Equipment List, unless System Management determines they are required under proposed clause 3.18.2(c)(v). Not including these Scheduled Generators on the Equipment List allows the relevant Market Generators to remove the Facilities from service at any time for maintenance, without the need for System Management approval. This reduces the value of such Facilities as a source of reliable capacity compared with larger Scheduled Generators that need to have their Planned Outages approved by System Management.

The Rule Change Panel considers that inclusion of smaller Scheduled Generators with Capacity Credits on the Equipment List would increase the value of their capacity to the WEM and improve the integrity of the RCM.

During the development of this Rule Change Proposal, most of the relevant Scheduled Generators were included on the Equipment List under clause 3.18.2(c)(iv)⁴⁴, so the question of whether their inclusion on the Equipment List should be mandatory was not considered by the IMO in any detail.

The Rule Change Panel does not consider that any corresponding issue exists for small Non-Scheduled Generators holding Capacity Credits. This is because there are strong incentives for Market Generators to make their Non-Scheduled Generators available in peak demand periods.

A requirement for all Scheduled Generators holding Capacity Credits to be included on the Equipment List was generally supported by attendees at the 17 September 2018 workshop. Alinta and Bluewaters offered explicit support for the change in their further submissions, while AEMO advised it had no objection but noted its powers to add Facilities to the Equipment List under clause 3.18.2(c)(v).

The Rule Change Panel proposes to replace proposed clause 3.18.2(c)(ii) with two clauses:

- clause 3.18.2(c)(ii), which requires the inclusion of all Scheduled Generators holding Capacity Credits on the Equipment List; and
- clause 3.18.2(c)(iii), which requires the inclusion of all Non-Scheduled Generators holding Capacity Credits with a Standing Data nameplate capacity that equals or exceeds 10 MW.

The Rule Change Panel also proposes the consequential renumbering of proposed clauses 3.18.2(c)(iiA), 3.18.2(c)(iii) and 3.18.2(c)(iv) to clauses 3.18.2(c)(iv), 3.18.2(c)(v) and 3.18.2(c)(vi) respectively.

6.4.1.2 Treatment of larger generation systems not on the Equipment List

During discussions with AEMO about this Rule Change Proposal, it was noted that a Scheduled Generator or Non-Scheduled Generator with a nameplate capacity that equals or exceeds 10 MW may not qualify for inclusion as either an Equipment List Facility or a Small Outage Facility.⁴⁵ This would exclude the Facility from any obligations to report its outages to System Management.

The Rule Change Panel considers it would be more logical for these Facilities to be treated in the same way as smaller Scheduled Generators and Non-Scheduled Generators that are

For example, if a 30 MW Scheduled Generator did not have Capacity Credits and was not required on the Equipment List by System Management under renumbered clause 3.18.2(c)(vi) to maintain power system security and reliability, then it would not be included on the Equipment List, but would also not qualify for inclusion under clause 3.18.2A because its nameplate capacity was too high.



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Renumbered in the proposed Amending Rules to clause 3.18.2(c)(v).

not required on the Equipment List. The Rule Change Panel therefore proposes additional changes to proposed clause 3.18.2A(a) to extend the scope of the clause to all Scheduled Generators, Non-Scheduled Generators and generation systems serving Intermittent Loads that are not required to be included on the Equipment List under clause 3.18.2(c).

To reflect that some of the Facilities subject to proposed clause 3.18.2A may have a nameplate capacity exceeding 10 MW, the Rule Change Panel also proposes additional changes to this clause and the proposed Glossary definitions of Outage Facility and Small Outage Facility to change the collective name for these Facilities from Small Outage Facility to Self-Scheduling Outage Facility.

The Rule Change Panel has not yet consulted with stakeholders on this additional change.

6.4.1.3 Materiality threshold for Non-Scheduled Generators

Currently the Market Rules do not apply any materiality threshold to the requirement to request or report Non-Scheduled Generator outages. This means, for example, that a Market Generator with a Non-Scheduled Generator on the Equipment List is technically obliged to request a Planned Outage before removing a single wind turbine or inverter from service for maintenance.

In practice, it is normal for a small proportion of the turbines or inverters that comprise a Non-Scheduled Generator to be out of service for routine maintenance or repair at any time. Market Generators do not usually request or report outages for these small events, due to the large administrative burden this would impose. While AEMO has advised that it does not require the information about such minor outages to manage the power system, the relevant Market Generators may still be technically in breach of the Market Rules.

The EMOP Consultation Group discussed the need for a materiality threshold in several workshops over 2016/17. The EMOP project proposed that a Market Generator should be required to request or report outages that reduce the available capacity of its Non-Scheduled Generator by an average MW quantity over a Trading Interval more than:

minimum (0.2 * Facility's nameplate capacity, 6) MW

RCP Support discussed the issue with MAC members and observers:

- during updates on the Rule Change Proposal RC_2014_03 at the 13 September 2017,
 13 December 2017 and 14 February 2018 MAC meetings;
- at the MAC workshop for RC 2014 03 held on 17 January 2018; and
- at the 17 September 2018 workshop for this Rule Change Proposal (RC_2013_15).

MAC members were generally supportive of the introduction of a materiality threshold and did not suggest any specific alternatives to the threshold proposed by the EMOP project. During the 17 September 2018 workshop, AEMO suggested that different thresholds might be appropriate for different intermittent generation types and it may be preferable to define the threshold(s) in a PSOP.

The Rule Change Panel sought stakeholder views on this question in the CFFS. AEMO, Alinta, Bluewaters and Perth Energy all supported the introduction of a materiality threshold. Perth Energy also considered that a 'materiality threshold' should apply to the Outages of Scheduled Generators, and in particular to Forced Outages of Scheduled Generators.



However, after discussion with Perth Energy to clarify its suggestion, the Rule Change Panel considers that the suggestion falls out of the scope of this Rule Change Proposal.⁴⁶

AEMO considered the proposed formula was a reasonable starting position but reiterated its suggestion that the Market Rules should require the threshold to be determined in a Market Procedure. In subsequent discussions, AEMO also suggested the threshold could be set using a regime based on that used to determine Tolerance Ranges and Facility Tolerance Ranges.

Alinta proposed the use of a flat percentage of at least 10% of nameplate capacity, to allow for increasing wind turbine sizes. No other submitter suggested an alternative threshold formula.

The Rule Change Panel does not consider, based on information provided to date, that the additional complexity and administrative overheads of a PSOP or Tolerance Range-style regime are warranted. The Rule Change Panel acknowledges that in some, very rare situations it may be necessary to set a more conservative threshold than the default to maintain power system security and reliability, and therefore seeks the views of stakeholders on:

- whether System Management should be empowered under the Market Rules to set a
 more conservative materiality threshold for a Non-Scheduled Generator if it considers it
 necessary to maintain power system security and reliability; and
- if so, whether such decisions should either be Reviewable Decisions or subject to appeal to the ERA.

The Rule Change Panel has also reviewed the proposed threshold formula in response to Alinta's comments regarding the increasing size of wind turbines. The originally proposed threshold was based on Semi-Scheduled Generator obligations to report outages to AEMO under the National Electricity Rules, to support the operation of AEMO's Australian Wind Energy Forecasting System. However, the Rule Change Panel considers the following factors are more relevant to the WEM:

- Under clauses 4.11.1(h) and 4.11.1D of the Market Rules, from the 2019 Reserve
 Capacity Cycle onwards a Forced Outage rate exceeding 10%, or a combined Forced
 Outage rate and Planned Outage rate exceeding 20%, can affect the quantity of
 Certified Reserve Capacity assigned to a Non-Scheduled Generator. Given this limit, it
 would be difficult to justify allowing the materiality threshold for a Non-Scheduled
 Generator to exceed 10%.
- It is also difficult to justify why the 6 MW limit should not be increased to 10 MW, to be consistent with the frequent use of 10 MW as a boundary for determining the obligations of generators (e.g. to meet the Balancing Facility Requirements) on the basis of the materiality of their impact on the WEM. However, although the Rule Change Panel agrees that wind turbines sizes are increasing, it does not consider that turbine size should in itself determine the threshold (e.g. if a single turbine had a capacity of 20 MW this would not in itself warrant an increase of the threshold to 20 MW).

Based on these considerations, the Rule Change Panel proposes to include a new clause 3.18.1A in the proposed Amending Rules, which sets the materiality threshold for requesting/reporting Non-Scheduled Generator outages to:

minimum (0.1 * Facility's nameplate capacity, 10) MW

For further discussion of Perth Energy's suggestion please see issue 26 in Appendix D.



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6.4.2 Opportunistic Maintenance Requirements

The Rule Change Panel identified two additional issues relating to Opportunistic Maintenance during its assessment of this Rule Change Proposal:

- whether the requirement under proposed clause 3.19.2(b)(ii) was still appropriate; and
- the impact of the requirement to include start-up times in outage periods on Market Generators with slow-starting Facilities.

6.4.2.1 Clarification of Requirements for Opportunistic Maintenance Requests

Clause 3.19.2(b)(ii) states that on-the-day Opportunistic Maintenance outages "must not require any changes in scheduled energy or ancillary services". The proposed Amending Rules for this Rule Change Proposal, in merging the concepts of on-the-day and day-ahead Opportunistic Maintenance, extended this requirement to apply to all Opportunistic Maintenance.

Before the implementation of the Balancing Market, Resource Plans and Verve Energy's Dispatch Plan provided an effective energy schedule for each Trading Interval, which could be used to test the compliance of an Opportunistic Maintenance request with clause 3.19.2(b)(ii). However, since the start of the Balancing Market in July 2012, the dispatch targets of Generators are determined in near-real time, making it unclear how the restriction in clause 3.19.2(b)(ii) should be applied.

The Rule Change Panel proposes to delete clause 3.19.2(b)(ii), because it considers the clause is unnecessary for the following reasons:

- Proposed clause 7A.2.8A requires Market Generators (other than Synergy in respect of the Balancing Portfolio) to make any capacity that is subject to an approved Planned Outage or an outstanding Planned Outage request unavailable in their Balancing Submissions. This means that the relevant capacity will not appear in the Forecast BMOs that are used by System Management and Market Participants to predict the eventual dispatch schedule.
- Facilities that are cleared for LFAS are required to offer the relevant capacity into the Balancing Market at the relevant Price Caps. This means the capacity cannot also be made unavailable in the Market Generator's Balancing Submissions, and therefore the Market Generator cannot apply for Opportunistic Maintenance without breaching proposed clause 7A.2.8A.
- When considering Opportunistic Maintenance requests, System Management is required under clause 3.19.6(b) to ensure that "the Facilities remaining in service must be capable of meeting the Ancillary Service Requirements". This means that any request that compromises the provision of Ancillary Services must be rejected by System Management.

AEMO noted the challenges of interpreting clause 3.19.2(b)(ii) at the 17 September 2018 workshop.

The Rule Change Panel sought feedback from stakeholders in the CFFS on whether clause 3.19.2(b)(ii) should be deleted or otherwise amended. Alinta and Bluewaters supported deletion of the clause in their further submissions, while AEMO supported further clarification of the clause and suggested this could include specifying considerations in a Market Procedure.



RCP Support sought clarification from AEMO on the suggestion in its further submission. In a meeting held on 24 January 2019, AEMO agreed that placing an obligation about "scheduled Ancillary Services" in clause 3.19.2(b)(ii) could create difficulties for Rule Participants (e.g. it could prevent Market Generators providing a System Restart Service from requesting Opportunistic Maintenance for their Facilities). The approval criteria for Opportunistic Maintenance requests were discussed, and it was noted that these criteria allow AEMO to reject an Opportunistic Maintenance request if it significantly impacts the Ancillary Service Requirements (e.g. a transmission line outage placing multiple generators on a radial connection). Given the Opportunistic Maintenance approval criteria and other safeguards in the Market Rules (such as the good faith obligations relating to Opportunistic Maintenance requests and LFAS Submissions), AEMO agreed that clause 3.19.2(b)(ii) should be deleted.

The Rule Change Panel also proposes to implement a suggestion from Bluewaters' first period submission to remove the requirement in clause 3.19.2(b)(i) that Opportunistic Maintenance outages be for 'minor' maintenance. The Rule Change Panel considers that the requirement for the maintenance to be minor:

- may be inappropriate for Opportunistic Maintenance outages that are used to start a Scheduled Outage a day early (as proposed in section 6.3.4.6 of this report), because the work performed during such outages may not be minor; and
- is unnecessary for other Opportunistic Maintenance outages, because the only test required is that the maintenance work can be completed within the 24-hour time limit.

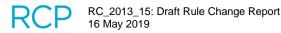
6.4.2.2 Allowance for Short Outages of Slow-Starting Generators

Synergy raised concerns in its further submission about the use of the undefined phrase 'unavailable for dispatch' in proposed clauses 7A.2.4A(b), 7A.2.4B(b), 7A.2.4C(b), 7A.2A.1 and 7A.2A.2. Synergy considered the drafting implied that if a Facility was offline and required some time to re-synchronise, the Market Generator would need to update its Balancing Submissions to show that the Facility was unavailable for the period of its start-up time. The Market Generator would then be required to log Forced Outages for those unavailability declarations under proposed clauses 7A.2A.1 or 7A.2A.2. Synergy suggested this would lead to undesirable outcomes (e.g. a peaking Facility that was rarely required to generate could theoretically be required to log Forced Outages for almost every Trading Interval).

On 25 January 2019, RCP Support met with Synergy to discuss Synergy's concerns. During this discussion, Synergy raised a further concern about the effects of including start-up times in outage periods. Synergy gave an example involving an offline Scheduled Generator with a 10-hour start-up time. If Synergy wanted to undertake maintenance on the Facility for a 30-minute period, it would need to request a 10.5-hour Opportunistic Maintenance outage to account for the Facility's start-up time. Synergy noted that the requirement to include start-up times in outage periods increased its risk of breaching its Refund Exempt Planned Outage limits.⁴⁷

As discussed in section 6.4.3.2 of this report, the Rule Change Panel considers that an outage period should only end when the relevant capacity could, with sufficient notice to account for any relevant Equipment Limits like start-up times, be made available for service again. In most cases, this will require a Market Generator seeking a Scheduled Outage to include the time for a cold start in the proposed outage period. The Rule Change Panel does

The Amending Rules in Schedule B, Part 3 of the Wholesale Electricity Market Rules Amending Rules 2016 (which commenced on 1 October 2017) imposed a limit on the level of Refund Exempt Planned Outages that can be taken by a Facility over any 1000 Trading Day period. A Market Participant is liable for Capacity Cost Refunds for any Planned Outages taken in excess of that limit.



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not consider this approach treats slow-starting plant unreasonably because it simply reflects the actual availability of the capacity to the WEM.

However, the Rule Change Panel notes that the Market Rules allow a Market Generator to make capacity 'available' in a Balancing Submission that it does not plan to have synchronised during the relevant Trading Interval; and do not require a Market Generator to update its Balancing Submission once it becomes too late to start the process that would synchronise the Facility by the start of the Trading Interval. Under the self-commitment model, a Market Generator bears the risk that its Balancing Facility will be dispatched in merit when it is not synchronised (obviously if it is dispatched out of merit its Equipment Limits will apply). If the capacity is dispatched in merit, then the Market Generator will have breached its dispatch obligations; but if it is not, then it will be deemed (from a compliance perspective at least) to have been available for service.

The Rule Change Panel does not propose to alter these arrangements, as noted in section 6.4.3.2 of this report, and specifically does not propose to require Market Generators to continually update their Balancing Submissions to reflect the passing of Facility start-up deadlines.

In response to the further concern raised by Synergy, the Rule Change Panel has assessed the scenario provided by Synergy and the effect of the proposed 30-minute outage on the availability of the Facility to the WEM.

For a particular Facility and a future Trading Interval there may be a point in time, if the Facility is offline, after which the Market Generator (or for Balancing Portfolio Facilities, System Management acting on Synergy's behalf) can no longer choose to provide energy from the Facility in that Trading Interval. Once this time has passed, there appears to be little point in the Market Generator seeking approval for Opportunistic Maintenance for that Trading Interval.

Figure 6.9 provides a graphical overview of the concept. In Example 1, Synergy decides at 11:30 AM on a Trading Day that it wants to carry out maintenance on an offline Scheduled Generator with a 10-hour start-up time (shown in green) between 12:00 PM and 12:30 PM (shown in red). The deadline for submitting and approving Opportunistic Maintenance requests starting at 2:00 PM has just passed, so it is too late to submit a request with a proposed start time of 12:00 PM (the Trading Intervals for which submission of an Opportunistic Maintenance request is still feasible are shown in blue).

However, at 11:30 AM the Facility could no longer be synchronised until 9:30 PM (shown in yellow), so the outage would not affect the true availability of the Facility between 12:00 PM and 9:30 PM, due to the state of the Facility and its start-up time given that state. However, the outage would extend the period in which the Facility would be unavailable by an hour, from 9:30 PM to 10:30 PM (shown in purple).

In this situation, the Rule Change Panel proposes that the Market Generator should be able to submit a request for approval of Opportunistic Maintenance for the period from 9:30 PM to 10:30 PM, rather than the full period from 12:00 PM to 10:30 PM. However, in this case the request would need to be approved within a 30-minute window (shown in black) so the work could start at 12:00 PM. This may be unlikely depending on how System Management decides to manage its Opportunistic Maintenance approval processes in the future.

If the request was submitted earlier (e.g. at 9:30 AM as shown in Example 2), this would give System Management more time to approve the request (2.5 hours, shown in black), but would also increase the period being made unavailable by the outage from 1 hour to 3 hours (purple).



Figure 6.9: Options for a 30-minute outage of a Balancing Facility with a 10-hour start-up time

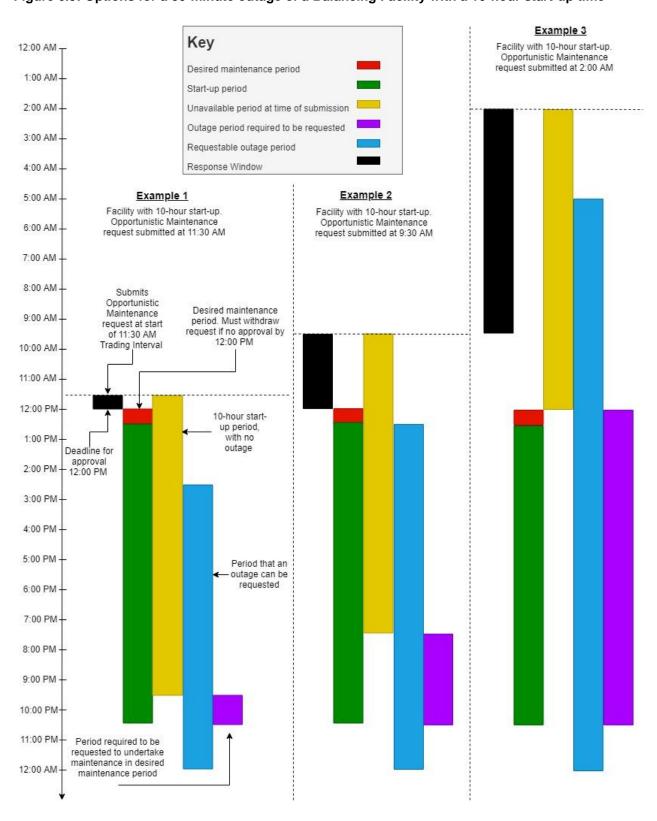
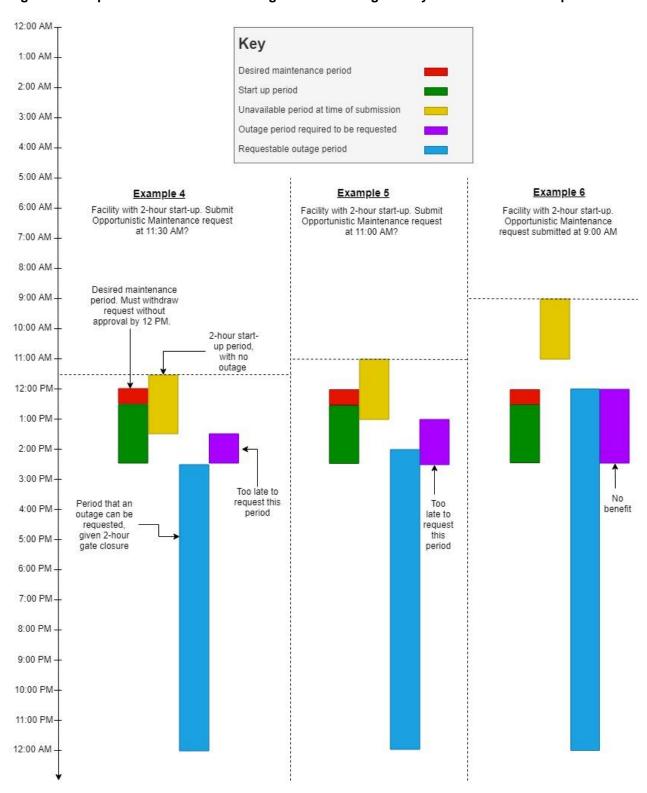


Figure 6.10: Options for a 30-minute outage of a Balancing Facility with a 2-hour start-up time



The Rule Change Panel notes that if the request was submitted at 2:00 AM (Example 3) or earlier, there would be no overlap between the period for which the actual availability of the Facility is now fixed (shown in yellow) and the actual outage period (i.e. the (red) work time plus the (green) start-up time), so no option would exist to request a shorter outage period.

The Rule Change Panel proposes to include a new clause 3.19.2H to implement this arrangement. The Rule Change Panel notes that the proposed arrangement:

- does not remove the requirement to account for start-up times in outage periods;
- only permits the shortening of Opportunistic Maintenance outage periods under quite specific, limited circumstances;
- is only relevant for slower starting Facilities (e.g. a Facility with a 2-hour start-up time has no potential to take advantage of the arrangement, as demonstrated in Figure 6.10); and
- places no obligation on AEMO to assess Opportunistic Maintenance requests any faster than is already required under clause 3.19.4.

The Rule Change Panel considers the proposed change would provide greater flexibility to Market Generators with slow-starting Facilities, without creating any adverse impacts on transparency or system reliability.

The Rule Change Panel has not yet consulted with stakeholders on this additional change, apart from Synergy (who was supportive of the change) and AEMO (who expressed some reservations about the complexity of the proposed arrangement).

6.4.3 Clarification of General Outage Planning Concepts

The Rule Change Panel proposes several additional changes to the proposed Amending Rules to clarify some of the central concepts that affect outage planning. These include:

- clarification of the ability of a Facility to undertake a Commissioning Test under a Planned Outage or Forced Outage;
- clarification of the concept of 'unavailable for service';
- clarification of the concept of 'maintenance'; and
- use of the term 'capacity or capability' to describe what is made unavailable (or less available) during an outage.

Several submissions on this Rule Change Proposal have suggested that its scope should include a review of the definitions of the different outage types in the Market Rules, and in particular, the definition of "Forced Outage". The Rule Change Panel considers that the proposed Amending Rules, including the clarifications discussed in this section 6.4.3, provide clarity on the types of outages that should be eligible for approval as Planned Outages; and do not need to include further elaboration of the definitions of Forced Outage or Consequential Outage to achieve the intent of the Rule Change Proposal. The Rule Change Panel does not therefore consider that a detailed review of these outage types is required to progress this Rule Change Proposal.

However, the Rule Change Panel notes that it is also currently progressing Rule Change Proposal RC_2014_03, which deals with issues affecting Forced Outages and Consequential Outages. The Rule Change Panel considers it will be more appropriate to review the definitions of these outage types as part of its assessment of that Rule Change Proposal.

6.4.3.1 Commissioning Tests and Outages

Proposed clause 7A.2.8A states that a Market Generator must, for each of its Balancing Facilities and for each Trading Interval in the Balancing Horizon, use its best endeavours to ensure that, at all times, any of the Facility's capacity that is:

- subject to an approved Planned Outage; or
- subject to an outstanding request for approval of a Planned Outage,

is declared as unavailable in the Balancing Submission for the Facility and the Trading Interval, unless the Facility is undertaking a Commissioning Test in that Trading Interval.

The Rule Change Panel agrees with the exemption in proposed clause 7A.2.8A for Facilities that are undertaking a Commissioning Test, because Market Generators performing maintenance on their Facilities may need to undertake tests that involve synchronising to the grid and exporting energy before their Facility is returned to normal service. The Rule Change Panel considers that requiring a Market Generator to end its Planned Outage before undertaking such a test is impractical and inefficient, as the Market Generator may want or need to carry out further maintenance work after the test.

However, based on its interpretation of the Bluewaters decision, AEMO has determined that a Commissioning Test cannot be undertaken under a Planned Outage. This is because a Market Generator that undertakes a Commissioning Test is required under the Market Rules to make Balancing Submissions at the relevant Price Caps, to ensure it is dispatched by AEMO in accordance with the output levels in its Commissioning Test Plan. AEMO has determined that this constitutes a return to service, so the Facility cannot remain under a Planned Outage because it is no longer "removed from service" as required under clause 3.18.4A.

The ban on Commissioning Tests under Planned Outages is only recent, and AEMO has advised RCP Support that apart from the removal from service issue it has no concerns about Market Generators undertaking these tests under a Planned Outage.

Attendees at the 17 September 2018 and 7 November 2018 workshops agreed that Market Generators should be allowed to undertake Commissioning Tests under a Planned Outage, and that an explicit clarification to this effect should be included in the proposed Amending Rules for this Rule Change Proposal. AEMO, Alinta, Bluewaters and Perth Energy also supported the proposed clarification in their further submissions.

The Rule Change Panel notes that Market Generators may also need to undertake Commissioning Tests when undertaking major repairs to their Facilities under a Forced Outage.

The Rule Change Panel therefore proposes to include a new clause 3.21A.448 to clarify that a Commissioning Test under an approved Commissioning Test Plan for an Outage Facility may cover periods in which some or all of the capacity or capability of the Outage Facility is subject to a Planned Outage or Forced Outage.

6.4.3.2 Clarification of 'Unavailable for Service'

During the consultation process for this Rule Change Proposal, several stakeholders raised concerns about the potential ambiguity of terms such as 'available', 'unavailable', 'available

Note that a clause 3.21A.14 exists in the Market Rules but is currently "[Blank]".



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for dispatch' and 'unavailable for dispatch' in the proposed Amending Rules. In particular, stakeholders raised concerns about:

- the applicability of the term 'available for dispatch' to Outage Facilities that are not dispatched by System Management in the same way as Scheduled Generators and Non-Scheduled Generators (e.g. items of network equipment);
- the need to distinguish between an outage and operation within the normal, expected limits of an Outage Facility, such as the expected temperature de-rating of a Scheduled Generator or transmission line, the start-up time and ramp rate limitations of a Scheduled Generator, or the intermittency of a Non-Scheduled Generator; and
- for Scheduled Generator and Non-Scheduled Generator capacity that is not subject to Capacity Credits, how to distinguish between capacity that the Market Generator simply chooses not to offer into the Balancing Market and capacity that is physically unavailable (e.g. because the Facility is undergoing maintenance).

To address the first concern, the Rule Change Panel has amended several proposed clauses in sections 3.18 and 3.19 to consistently use the terms 'available for service' and 'unavailable for service' instead of more general terms such as 'unavailable', or more generator-oriented terms such as 'unavailable for dispatch'.

To address the second and third concerns, the Rule Change Panel proposes to include a new clause 3.18.1B, which provides clarification on when an Outage Facility's capacity or capability should (for the purposes of sections 3.18 and 3.19) be deemed to be unavailable for service.

The Rule Change Panel considers that capacity or capability should be deemed to be unavailable for service in a Trading Interval if it could not, in response to an instruction or direction from System Management, be used to provide the relevant service expected from that capacity or capability.

To provide for the necessary distinction between the normal operational limits of an Outage Facility and an outage, the hypothetical instruction or direction from System Management is required to be consistent with the agreed normal operating limits of the Outage Facility. The specification of these limits depends on the type of Outage Facility. For example:

- for Scheduled Generators and Non-Scheduled Generators, the relevant limits are the Equipment Limits of the Facility;⁴⁹
- for items of network equipment, the relevant limits appear to be provided to System Management in accordance with the PSOP referred to in clause 2.28.3A(a); and
- for Outage Facilities subject to an Ancillary Services Contract, the relevant limits are expected to include the Outage Facility's Equipment Limits and any contract-specific limits in the Ancillary Services Contract.

For a Non-Scheduled Generator, the expected service depends on the availability of its fuel source (e.g. a solar farm is not unavailable for service because the sun is not shining at the time). New clause 3.18.1B includes an explicit clarification to this effect.

The Rule Change Panel seeks the views of stakeholders on whether the information listed in clause 3.18.1B appropriately defines the normal operating limits of Outage Facilities and

⁴⁹ An Equipment Limit is defined in the Market Rules as any limit on the operation of a Facility's equipment that is recorded in the Standing Data for the Facility.



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allows a practical distinction to be made between the normal operation of an Outage Facility and a state that should be regarded as unavailable for service.

The Rule Change Panel notes that the Equipment Limits of a Scheduled Generator include its start-up times, ramp rate limits and temperature-related limits on sent out capacity. This means, for example, that:

- A Scheduled Generator with a 4-hour start-up time could be offline during a Trading Interval starting at 2:00 PM without being unavailable for service in that Trading Interval, provided that it could have synchronised and provided energy in that Trading Interval if System Management had instructed it to do so by 10:00 AM on the same day.
- A Scheduled Generator returning from a Planned Outage will, following the completion
 of the relevant maintenance work, remain unavailable for service until the time the
 Market Generator could restart the Facility and synchronise it to the grid. If the Market
 Generator decides to leave the unit offline (because the Balancing Forecast indicates it
 is not required) then the Market Generator should use the relevant Equipment Limit to
 determine the end time of the outage period.
- Scheduled Generator capacity that is affected by normal temperature-related de-rating would not become 'unavailable for service', because a direction to generate above the level expected for the current site temperature would be inconsistent with the Equipment Limits of the Facility.

6.4.3.3 Clarification of 'Maintenance'

The Rule Change Panel proposes to include new clause 3.18.1C to provide clarification on the types of activities that qualify as maintenance and are therefore eligible to be performed under a Planned Outage. Under new clause 3.18.1C, for the purposes of outage planning and approval:

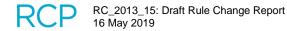
references to 'maintenance' include but are not limited to preventative maintenance, corrective maintenance, plant inspections, upgrades and tests that require some or all of the capacity or capability associated with an Outage Facility being unavailable for service when such maintenance would be reasonably considered to be required in accordance with good industry practice.

The Rule Change Panel notes that a maintenance activity could be consistent with clause 3.18.1C but still not be eligible for approval as a Planned Outage, for example if the outage to perform corrective maintenance did not meet the availability requirement.

6.4.3.4 Capacity or Capability

During the consultation period for this Rule Change Proposal, AEMO raised a concern that references to the 'capacity' of an Outage Facility might be misleading for those Outage Facilities that do not provide 'capacity' in the RCM sense. AEMO suggested that these concerns might be addressed by replacing the term 'capacity' in the relevant clauses with the term 'capacity or capability'.

As mentioned briefly in section 6.3.4.4, the Rule Change Panel has adopted this suggestion and proposes changes to several clauses in sections 3.18 and 3.19 to replace 'capacity' with the more general 'capacity or capability'.



6.4.4 Additional Minor Issues

The Rule Change Panel also proposes the following minor enhancements to improve the clarity and integrity of the outage planning provisions in the Market Rules:

- Equipment List maintenance requirement: The Rule Change Panel proposes additional changes to proposed clause 3.18.2(b) to strengthen and clarify the obligations on System Management to keep the Equipment List up to date. The changes are based on a suggestion made by System Management in its first period submission on this Rule Change Proposal.
- Removal of requirement for outage period details in Scheduled Outage approval requests: The Rule Change Panel proposes to remove the second sentence of proposed clause 3.19.1, i.e. the requirement for a request for approval of a Scheduled Outage to specify the Trading Intervals during which the Scheduled Outage will occur. The requirement is unnecessary because the outage period is specified by the Rule Participant when the Outage Plan is first submitted.
- Relocation of the definition of Scheduled Outage: The Rule Change Panel proposes to
 move the definition of Scheduled Outage from section 3.19, which only deals with the
 final approval of Scheduled Outages, to the Glossary.
- Outage recall and Self-Scheduling Outage Facilities: The Rule Change Panel proposes an additional change to proposed clause 3.20.1 to reflect the existing exemption of Self-Scheduling Outage Facilities from obligations under section 3.20 (which deals with Planned Outage recalls) that is specified in clause 3.18.2A(a).
- Minor administrative and typographical changes: The Rule Change Panel proposes several other minor administrative and typographical changes to improve the clarity and integrity of the drafting. These changes are summarised in section 6.5 of this report.

6.5 Additional Changes to the Proposed Amending Rules

The Rule Change Panel has identified several changes to the proposed Amending Rules in this Rule Change Proposal that are needed to reflect:

- the changes made to the Market Rules by the Minister and the Rule Change Panel since the submission of the Rule Change Proposal on 23 December 2013; and
- the commencement of the Amending Rules for RC_2014_06 on 1 July 2019.

A summary of these necessary changes is provided in Appendix A of this report.

The Rule Change Panel has also made some further changes to the proposed Amending Rules following the further submission period. These changes, which are shown in Appendix E of this report, include:

- the changes described in sections 6.3 (Assessment of the Proposed Changes) and 6.4 (Additional Related Issues Identified by the Rule Change Panel) of this report; and
- the following minor and administrative changes:
 - clause 3.18.1: use standard terminology for the reference to sections 3.18-3.21;
 - o clause 3.18.2(a): include an explicit reference to the term Equipment List;
 - clause 3.18.2A(c): replace "requested outage" with "proposed Planned Outage" because the clause deals with a notice rather than a request;



- clauses 3.18.3, 3.18.15 and 3.18.16: insert the missing "the" before "Economic Regulation Authority" in several places;
- clause 3.18.10: include a clarification that the clause (which specifies System Management's obligations to evaluate Outage Plans) is subject to proposed clauses 3.18.10A (which prohibits the acceptance of an Outage Plan for an outage that System Management is aware does not meet the availability requirement) and 3.18.10B (which requires System Management to delay its evaluation of an Outage Plan in some circumstances);
- clauses 3.18.11(b), 7.1.1(d), 7.1.1(g) and 7.1.1(h): changes to reflect that generation systems may be distribution-connected, that items of equipment forming part of a distribution system may be included on the Equipment List, and that information on distribution system equipment may be required by System Management to support the Medium Term PASA, Short Term PASA and dispatch processes;
- clause 3.19.2: include a clarification that the clause (which allows Rule Participants to request approval of Opportunistic Maintenance within certain timeframes and subject to certain conditions) is subject to clause 3.19.2B (which prohibits a Rule Participant from submitting an Opportunistic Maintenance request if it cannot meet the availability declaration requirement);⁵⁰
- clause 3.19.3: include a clarification that the clause (which specifies System Management's obligations to assess requests for approval of Scheduled Outages or Opportunistic Maintenance) is subject to clauses 3.19.3B (which prohibits the approval of an Opportunistic Maintenance request for an outage that System Management is aware does not meet the availability requirement) and 3.19.3C (which requires System Management to delay its assessment of an Opportunistic Maintenance request in some circumstances);
- clause 7A.2.6: include clauses 7A.2.9B and 7A.2.9C in the list of clauses under which a revised Balancing Submission may be submitted;
- clause 7A.2.8A: include a clarification that the exception specified at the end of the clause only applies in Trading Intervals where the Balancing Facility is expected to generate in accordance with a Commissioning Test;
- clause 7A.2.9A(a): include a clarification that the exception specified in the clause only applies in Trading Intervals where the Scheduled Generator is expected to generate in accordance with a Commissioning Test; and
- clauses 3.18.2(c)(iv), 3.18.3(c)(i), 3.18.6(b), 3.19.1, 3.19.2, 3.19.2A, 3.19.11 3.20.1,
 7A.2.9A, 7A.2.9C, 7A.2A.3, and the section 7A.2A heading: minor wording and punctuation changes to improve the clarity and consistency of the drafting.

The Rule Change Panel notes that AEMO suggested a similar change to clause 3.19.1 during the 17 September 2019 workshop. However, the change is no longer required for clause 3.19.1, because under the changes proposed in section 6.3.4.5 of this report clause 3.19.2B no longer applies to approval requests for Scheduled Outages (the subject of clause 3.19.1), but only to requests for approval of Opportunistic Maintenance.



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6.6 Wholesale Market Objectives

The Wholesale Market Objectives are:

- (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
- (b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- (c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

The Rule Change Panel considers that the Market Rules as a whole, if amended as proposed in section 7 of this report, will better achieve Wholesale Market Objectives (a), (b) and (d) and be consistent with the remaining Wholesale Market Objectives.

The Rule Change Panel's assessment is presented below.

Obligations to participate in the outage planning process

The removal of the requirement to include Demand Side Programmes with Capacity Credits and non-essential transmission equipment on the Equipment List, and the introduction of a materiality threshold for the reporting of Non-Scheduled Generator outages, will promote economic efficiency and contribute to minimising the long-term cost of electricity by removing unnecessary administrative burdens on System Management and other Rule Participants.

The clarification of the requirement to request (or report for a Self-Scheduling Outage Facility) a Planned Outage before undertaking discretionary maintenance will promote the reliable supply of electricity in the WEM by ensuring that System Management has accurate information about whether an Outage Facility is actually available for service. The change will also promote economic efficiency by providing Market Participants with more accurate and complete information about the actual availability of Scheduled Generators and Non-Scheduled Generators, as will extending the scope of clause 3.18.2A to include any larger Scheduled Generators or Non-Scheduled Generators without Capacity Credits.

The mandatory inclusion of small Scheduled Generators with Capacity Credits on the Equipment List will promote the reliable supply of electricity by increasing the value of these Facilities as a source of reliable capacity.

Interactions between Planned Outages and Balancing Submissions

The removal of the requirement to include declared MW quantities of unavailable Non-Scheduled Generator capacity in Balancing Submissions will promote economic efficiency and contribute to minimising the long-term cost of electricity by removing an unnecessary administrative burden on Market Generators.

The establishment of a firm deadline for the approval or rejection of Opportunistic Maintenance (30 minutes before Balancing Gate Closure for the Trading Interval in which the outage is due to commence) will promote economic efficiency and contribute to minimising the long-term cost of electricity by providing as much time as possible for the processing of



requests, while still ensuring that Market Generators have sufficient time to adjust their final Balancing Submissions (if necessary) to reflect the approval or rejection of a request.

The establishment of a firm deadline for the approval or rejection of Scheduled Outages (2:00 PM on TD-2) will promote economic efficiency and contribute to minimising the long-term cost of electricity by:

- providing an efficient balance between the need for certainty and the flexibility benefits of a later deadline; and
- providing a Market Generator with a decision on a Scheduled Outage in a timeframe that allows it to reflect that decision in its STEM Submissions and Balancing Submissions, avoiding potentially inefficient STEM outcomes and improving the accuracy of Balancing Forecasts and Forecast BMOs.

The amendments relating to the interactions between Planned Outages and Balancing Submissions will promote economic efficiency by improving the transparency and likely accuracy of Balancing Forecasts and Forecast BMOs.

The clarification of obligations to return capacity to the Balancing Market after the late rejection or recall of a Planned Outage, or the late cancellation/rejection of a Consequential Outage or Commissioning Test Plan, will promote economic efficiency by ensuring that the required capacity is returned to the Balancing Market as soon as practicable in these situations, while avoiding the imposition of unachievable obligations on Market Generators.

Timelines for Planned Outages

The proposed Planned Outage timelines will increase flexibility for Rule Participants while respecting the need to provide transparency, and will encourage participants to undertake an efficient level of maintenance that balances maintenance costs against the need to meet reliability obligations.

The removal of prohibitions on:

- Opportunistic Maintenance outages spanning two Trading Days; and
- the submission of Opportunistic Maintenance requests between 10:00 AM on the Scheduling Day and the start of the Trading Day,

will promote economic efficiency and contribute to minimising the long-term cost of electricity by removing unnecessary timing restrictions that may interfere with the efficient use of Opportunistic Maintenance.

The requirement for a 24-hour gap between Opportunistic Maintenance outages will ensure that Rule Participants cannot use Opportunistic Maintenance to effectively avoid the required notice period for a Scheduled Outage. This will:

- promote economic efficiency through the provision of timely information to the market about longer outages; and
- promote the reliable supply of electricity by encouraging participants to forward-plan their outages and reduce the need for last-minute maintenance.

The changes to the notification deadlines for Planned Outages of Self-Scheduling Outage Facilities will promote economic efficiency by removing an unnecessary restriction on the timing of decisions to undertake maintenance on these Outage Facilities.



Criteria for approval of Planned Outages

The clarification of the obligations on Rule Participants to notify System Management of changes to details of proposed Planned Outages will promote the reliable supply of electricity by ensuring that System Management has access to up to date information about proposed Planned Outages.

The revised approach to the submission of outage requests will facilitate economic efficiency by removing a disincentive for a Rule Participant to reduce the duration of proposed Planned Outages.

The proposed availability declaration framework will promote economic efficiency and the reliable supply of electricity, and is likely to contribute to minimising the long-term cost of electricity, by:

- replacing the current availability requirement (that the relevant capacity is available, or capable of being made available, immediately prior to the commencement of the proposed outage) with a requirement (that the relevant capacity would otherwise be available for the duration of the proposed outage period) which provides a more accurate indication of whether the proposed maintenance is discretionary;
- reducing the incentives to apply for outages that are longer than needed, thereby improving the accuracy of outage information and PASA forecasts, and increasing the availability of outage slots for other Rule Participants;
- removing the need for System Management to request written availability declarations in most cases, as these will be implicit in outage requests;
- facilitating extensions of Scheduled Outages that overrun their original timeframe by relaxing the availability requirement for a Planned Outage that immediately follows another Planned Outage (subject to certain safeguards);
- encouraging the early submission of Outage Plans through the protection of an accepted Outage Plan from subsequent rejection due to a Forced Outage of the Equipment List Facility, which will lead to timelier and more accurate outage information and improve PASA forecasts;
- improving flexibility by allowing a Rule Participant to start a Scheduled Outage a day early using an Opportunistic Maintenance Outage; and
- providing more appropriate mechanisms to prevent the acceptance or approval of disingenuous outage requests.

Other issues identified by the Rule Change Panel

The ability to reduce the effective outage period for a short maintenance task on an offline, slow-starting Scheduled Generator will promote economic efficiency by providing greater flexibility to Market Generators with slow-starting Facilities, without creating any adverse impacts on transparency or system reliability.

The clarification that a Market Generator is permitted to undertake a Commissioning Test under a Planned Outage will promote economic efficiency by allowing a Market Generator to undertake tests that involve synchronising to the grid and exporting energy as required, without the risk and inflexibility of having to request multiple Planned Outages.



General competition effects

The proposed amendments will encourage competition among generators by reducing the costs and risks of participation in the market, through:

- the provision of more accurate outage information, PASA forecasts, Balancing Forecasts and Forecast BMOs;
- the clarification of outage planning processes and the increased flexibility of those processes;
- the clarification of outage planning obligations and the removal of unnecessary obligations; and
- increased certainty about the timing of some key decisions (e.g. deadlines for approval of Scheduled Outages).

Additionally, the removal of the need for System Management to exercise discretion in making some decisions (such as decisions on eligibility for an extension outage, what constitutes minor maintenance, whether an Opportunistic Maintenance outage requires any change in scheduled energy or ancillary services, or on whether it should reject an outage that it is aware does not meet the availability requirements) will encourage competition among generators by avoiding perceptions of bias and increasing confidence in the outage planning process.

6.7 Protected Provisions, Reviewable Decisions and Civil Penalties

The proposed Amending Rules do not affect any Protected Provisions or Reviewable Decisions.

The following civil penalty provisions are proposed to be amended. However, the Rule Change Panel considers that the proposed amendments do not alter the intent of the provisions and so no amendments to the current civil penalties are required.

- Clause 3.18.7: Good faith intention for Planned Outage requests the proposed amendments are to improve clarity and remove any implication that an Outage Facility must be available for service immediately prior to the start of a Planned Outage.
 However, the amendments do not affect the general meaning or the intent of the clause.
- Clause 3.18.8: Requirement on a participant to provide notification where it wishes to cancel a Planned Outage – the proposed amendments are to clarify that the Rule Participant must withdraw its Outage Plan (not just notify System Management) and remove any implication that an Outage Facility must be available for service immediately prior to the start of a Planned Outage. However, the amendments do not affect the general meaning or intent of the clause.
- Clause 3.18.9: Requirement to notify System Management of changes to an Outage
 Plan the proposed amendments extend the scope of the clause to cover any changes
 to the information provided in an Outage Plan, not just changes to the outage period.
 The Rule Change Panel considers that the amendments should not affect the
 classification of this clause as a civil penalty provision.
- Clause 3.19.1: Requirement to seek approval of a Scheduled Outage the proposed amendments clarify the deadline for Scheduled Outage approval requests, move the definition of Scheduled Outage to the Glossary, and remove the requirement for a Rule



Participant to re-specify the outage period in an approval request. However, the amendments do not affect the general meaning or intent of the clause.

- Clause 7A.2.9: Synergy Balancing Submission obligations the proposed amendments are to:
 - qualify that Synergy's reasonable expectation of the capability of its Balancing Portfolio to be dispatched in a Trading Interval is subject to the requirement on Synergy to declare any capacity subject to an outstanding Opportunistic Maintenance request as available in its Balancing Submission; and
 - oblige Synergy to update its Balancing Submissions to reflect a Forced Outage or the late approval of a Planned Outage, if there is a credible risk that the excess capacity will distort the operation of the Balancing Market.

The Rule Change Panel considers that the amendments should not affect the classification of this clause as a civil penalty provision.

The Rule Change Panel suggests that the following clauses be considered for inclusion as civil penalty provisions.

- Clause 3.18.5D: the proposed amendments (which completely replace the current contents of this clause) prohibit a Rule Participant from submitting an Outage Plan if it is aware, or ought to be aware in the circumstances, that the proposed outage does not meet the availability requirement.
- Clause 3.18.6A: this new clause prohibits a Rule Participant from submitting an Outage
 Plan for an outage period when it is aware, or ought to be aware in the circumstances,
 that it will not be possible to complete the proposed maintenance and make the capacity
 available for service by the end of that outage period.
- Clause 3.18.9B: this new clause prescribes the action(s) that a Rule Participant must take if, after submitting an Outage Plan, it becomes aware, or ought to have become aware in the circumstances, that the proposed outage no longer meets the availability requirement.
- Clause 3.19.2A: this new clause requires a Rule Participant to request approval for a Scheduled Outage or Opportunistic Maintenance from System Management in accordance with sections 3.18 and 3.19 of the Market Rules if:
 - the Rule Participant intends that some or all of an Equipment List Facility's capacity or capability will be unavailable for service for a period for the purpose of maintenance; and
 - the Market Participant is not aware that the Equipment List Facility's capacity or capability would not otherwise be available for service for the duration of the proposed outage.
- Clause 3.19.2B: this new clause prohibits a Rule Participant from requesting approval of Opportunistic Maintenance if it is aware, or ought to be aware in the circumstances that the proposed outage does not meet the availability requirement.
- Clause 3.19.2C: this new clause requires a Rule Participant that no longer intends to
 proceed with an Opportunistic Maintenance outage to inform System Management and
 withdraw its Opportunistic Maintenance request as soon as practicable. (Note that
 clause 3.18.8, which applies a similar obligation in respect of Scheduled Outages, is a
 civil penalty provision.)



- Clause 3.19.2D: this new clause requires a Rule Participant to notify System
 Management of changes to the information provided in a request for approval of
 Opportunistic Maintenance. (Note that clause 3.18.9, which applies a similar obligation in
 respect of Outage Plan changes, is a civil penalty provision.)
- Clause 3.19.2F: this new clause prescribes the action(s) that a Rule Participant must take if, after submitting a request for approval of Opportunistic Maintenance, it becomes aware, or ought to have become aware in the circumstances, that the proposed outage no longer meets the availability requirement.
- Clauses 7A.2.8A and 7A.2.9A: these new clauses require Market Participants to ensure their Balancing Submissions correctly reflect approved outages and outstanding outage requests.
- Clauses 7A.2.9B and 7A.2.9C: these new clauses require Market Participants to update their Balancing Submissions to reflect the late rejection of an approved Planned Outage or the recall of a Planned Outage that is underway.
- Clauses 7A.2A.1 and 7A.2A.2: these new clauses require Market Participants to notify System Management of a Forced Outage or Consequential Outage for capacity declared unavailable in a Balancing Submission that is not otherwise accounted for.

The Rule Change Panel will liaise with the Public Utilities Office on any changes to civil penalty provisions.

6.8 Practicality and Cost of Implementation

6.8.1 Cost

AEMO provided the following advice in its further submission:

The proposed changes in the CFFS will require system and procedural changes to ensure AEMO remains compliant with the proposed WEM Rules. Based on the drafting in the CFFS, it is anticipated that the cost to implement these changes should not exceed \$70,000.

This advice superseded the cost estimates previously provided by System Management in its first period submission.

AEMO has since advised that, due to the delay in progressing this Rule Change Proposal, it intends to implement the required system changes as part of the SMST project. As this may result in a near-zero development/testing cost, AEMO has provided an updated cost estimate of between \$30,000 and \$70,000 to implement this Rule Change Proposal. This estimate comprises overheads for use of AEMO's subject matter experts to support delivery (\$30,000) and an allowance for unforeseen variations in development/testing effort (\$40,000).

AEMO has confirmed that this estimate covers the additional changes to the proposed Amending Rules presented in this report.

While the Rule Change Panel has not conducted a formal cost-benefit analysis for this Rule Change Proposal, it is of the view that AEMO's costs to implements the proposed amendments are justified by:

 the likely cost savings for Market Participants due to the increased flexibility of the outage planning processes (e.g. through the ability to undertake Opportunistic Maintenance spanning two Trading Days, conduct a Commissioning Test under a Planned Outage or obtain an extension of a Scheduled Outage);



- the likely efficiency benefits resulting from the provision of more complete, timely and accurate outage information, and more accurate Balancing Forecasts and Forecast BMOs;
- the likely administrative and compliance cost savings due to the removal of unnecessary obligations on AEMO and other Rule Participants; and
- the overall improvement to the clarity and integrity of the Market Rules.

On several occasions, Western Power has expressed concerns about the potential high implementation costs of including distribution network equipment on the Equipment List. However, as discussed in section 6.3.1.2 of this report, the Rule Change Panel proposes to avoid these costs by restricting the obligation in proposed clause 3.18.2(c)(i) to transmission network equipment only.

Bluewaters indicated in its first period submission that the proposed amendments would result in process changes at Bluewaters that are not expected to have any material costs for implementation. Synergy indicated in its further submission that, subject to the resolution of the issues it had raised, it did not expect to incur costs for the Rule Change Proposal.

Perth Energy advised in its further submission that some of the Rule Change Panel's proposed amendments will require minor changes to Perth Energy's systems and processes. However, Perth Energy considered that the level of detail provided in the CFFS was insufficient for it to accurately determine the necessary changes or associated costs.

Stakeholders provided no other information regarding implementation costs.

6.8.2 Practicality

In its further submission, AEMO anticipated that it would be able to complete the necessary system and procedural changes for this Rule Change Proposal by 1 August 2019, approximately two months after the expected publication of the Final Rule Change Report on 30 May 2019.

To achieve this timeframe, AEMO proposed to commence informal consultation on the required changes to the PSOP: Facility Outages following the closure of the second submission period but before the publication of the Final Rule Change Report. AEMO proposed to commence the formal Procedure Change Process once the Final Rule Change Report was published.

As mentioned above, due to the delay in progressing this Rule Change Proposal, AEMO will now implement the required system changes as part of the SMST project. While the indicative completion date for the SMST project is late November 2019, there is a risk that the completion date will be delayed due to the complexity of the systems involved. In addition, there are implementation risks due to availability of resources over the Christmas break. Therefore, AEMO has recommended a commencement date of 1 February 2020.

Perth Energy considered in its further submission that the level of detail provided in the CFFS was insufficient for it to accurately determine the timeframe it required to implement the proposed changes.

Bluewaters (in its first period submission) and Synergy (in its further submission) indicated that they did not require time to implement the proposed changes.

The Rule Change Panel received no other relevant comments about the practicality of implementing the Rule Change Proposal. The Rule Change Panel agrees with AEMO that 1 February 2020 is an appropriate commencement date for the proposed Amending Rules.



6.8.3 Amendments to Associated Market Procedures

The Rule Change Panel notes that the proposed changes will require amendments to the PSOP: Facility Outages.

7. Amending Rules

The Rule Change Panel proposes to implement the following Amending Rules (deleted text, added text, clauses that are included for context but not amended):

- 3.18. Outage Scheduling
- 3.18.1. Where a reference is made to an outage of a Facility or item of equipment in clauses 3.18, 3.19, 3.20 and 3.21 this section 3.18 and sections 3.19, 3.20 and 3.21, this includes partial and complete outages and de-ratings of the Facility or item.
- 3.18.1A. The obligations specified in this section 3.18 and sections 3.19 and 3.21 to request or report Outages do not apply to Market Participants in respect of an outage of a Non-Scheduled Generator if the average MW de-rating over the relevant Trading Interval is less than:

min $(0.1 \times Nameplate Capacity, 10)$

where Nameplate_Capacity is the MW quantity provided for the Non-Scheduled Generator under Appendix 1(e)(ii).

- 3.18.1B. For the purposes of this section 3.18 and section 3.19, capacity or capability associated with an Outage Facility is deemed to be unavailable for service in a Trading Interval if the capacity or capability could not, in response to an instruction or direction to the Market Participant or Network Operator from System

 Management that was consistent with the Outage Facility's Equipment Limits, any relevant limits or information provided to System Management in accordance with the Power System Operation Procedure referred to in clause 2.28.3A(a), or any relevant limits specified in an Ancillary Service Contract (as applicable), be used to provide the relevant service expected from the capacity or capability of the Outage Facility. To avoid doubt, capacity of a Non-Scheduled Generator is not deemed to be unavailable for service because of a shortfall of the intermittent energy source used by the Non-Scheduled Generator to generate electricity.
- 3.18.1C. For the purposes of this section 3.18 and section 3.19, references to 'maintenance' include but are not limited to preventative maintenance, corrective maintenance, plant inspections, upgrades and tests that require some or all of the capacity or capability associated with an Outage Facility being unavailable for service when such maintenance would be reasonably considered to be required in accordance with good electricity industry practice.

3.18.2.

- (a) System Management must compile, and publish, 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.
- (a) System Management must maintain and publish a list of all equipment on the SWIS that it determines should be subject to outage scheduling in



- accordance with this section 3.18 and sections 3.19, 3.20 and 3.21 ("Equipment List").
- (b) System Management must review the list described in clause 3.18.2(a) from time to time and may update the list. System Management must publish any such updates.
- (b) System Management must, as soon as practicable after it becomes aware of an error relating to the Equipment List, or otherwise determines that a change is required to the Equipment List, update the Equipment List to address the error or reflect the change and publish the updated Equipment List on the Market Web Site.
- (c) The list described in clause 3.18.2(a) Equipment List must include:
 - i. all transmission network Registered Facilities;
 - any part of a transmission system (however defined by System
 Management) that could limit the output of a generation system that
 System Management has included on the Equipment List;
 - ii. all Registered Facilities holding Capacity Credits, except those to which clause 3.18.2A applies;
 - ii. all Scheduled Generators holding Capacity Credits;
 - iii. all Non-Scheduled Generators holding Capacity Credits with a

 Standing Data nameplate capacity that equals or exceeds 10 MW;
 - iiA.iv. all generation systems to which clause 2.30B.2(a) relates, except those to which clause 3.18.2A applies with a nameplate capacity that equals or exceeds 10 MW;
 - iii.v. all Registered Facilities subject to an Ancillary Services Contract; and
 - iv.vi. any other equipment that System Management determines must be subject to outage scheduling to maintain Power System Security and Power System Reliability.
- (d) The list described in clause 3.18.2(a) Equipment List may specify that a piece of equipment on the list an Equipment List Facility is subject to outage scheduling by System Management only at certain times of the year.
- (e) [Blank]
- (f) If a Market Participant's or Network Operator's Facility (or an item of equipment forming part of that Facility) is on the list described in clause 3.18.2(a), then the Market Participant or Network Operator, as applicable, must schedule outages for the equipment in accordance with this clause 3.18 and clauses 3.19, 3.20 and 3.21.
- (f) A Market Participant or a Network Operator must schedule outages for each of its Equipment List Facilities. Outages must be scheduled in accordance with this section 3.18 and sections 3.19, 3.20 and 3.21.



(a) Except where clause 3.18.2(c)(iv) applies, Registered Facilities with a Standing Data nameplate capacity of less than 10 MW and generation systems to which clause 2.30B.2(a) relates and which have a nameplate capacity of less than 10 MW are not required to schedule outages for that equipment in accordance with this clause 3.18 and clauses 3.19 and 3.20 other than as required by this clause 3.18.2A.

(a) If a generation system:

- i. is a Scheduled Generator, a Non-Scheduled Generator or a generation system to which clause 2.30B.2(a) relates; and
- ii. is not required to be included on the Equipment List under clause 3.18.2(c),

then the relevant Market Participant is not required to schedule outages in accordance with this section 3.18 and sections 3.19 and 3.20 for that generation system ("Self-Scheduling Outage Facility") other than as required by this clause 3.18.2A.

- (b) If clause 3.18.2A(a) applies to a Market Participant's Facility or generation system then that Market Participant must notify System Management of proposed Planned Outages of that Facility or generation system not less than 2 Business Days prior to their commencement and must specify the duration of the Planned Outage;
- (b) A Market Participant must notify System Management of a proposed Planned Outage if, and only if:
 - i. the Market Participant intends that some or all of the capacity of its

 Self-Scheduling Outage Facility will be unavailable for service for a

 period for the purpose of maintenance; and
 - ii. subject to clause 3.19.2G, the Market Participant is not aware that the capacity would otherwise be unavailable for service for any part of the duration of the proposed Planned Outage.
- (c) Where System Management is advised of a proposed Planned Outage in accordance with clause 3.18.2A(b) then System Management must record that outage as an approved Planned Outage.
- (c) The notice under clause 3.18.2A(b) must be given:
 - i. for an outage exceeding 24 hours in duration, no later than
 10:00 AM on the day prior to the Scheduling Day for the Trading
 Day in which the proposed Planned Outage is due to commence;
 and
 - ii. for an outage of up to 24 hours in duration, no later than 30 minutes before Balancing Gate Closure for the Trading Interval in which the proposed Planned Outage is due to commence.

- (d) The notice under clause 3.18.2A(b) must include the information specified in clause 3.18.6. For the purposes of this clause 3.18.2A(d), each reference to an "Equipment List Facility" in clause 3.18.6 is to be read as a reference to a "Self-Scheduling Outage Facility".
- (e) System Management is deemed to have approved each proposed Planned
 Outage for a Self-Scheduling Outage Facility that is notified under clauses
 3.18.2A(b) or 3.18.2A(g) and in accordance with clauses 3.18.2A(c) and
 3.18.2A(d). The deemed approval takes effect when System Management receives the notice.
- (f) Where a Market Participant no longer intends that the relevant capacity of its Self-Scheduling Outage Facility will be unavailable for service for the purpose of maintenance it must inform System Management and withdraw the notice of the proposed Planned Outage as soon as practicable.
- (g) If a Market Participant becomes aware of any changes to the information provided to System Management in a notice of a proposed Planned Outage for a Self-Scheduling Outage Facility, then the Market Participant must submit a revised notice to System Management for the Self-Scheduling Outage Facility as soon as practicable that complies with the requirements of a notice of a proposed Planned Outage for a Self-Scheduling Outage Facility in this clause 3.18.2A.
- (h) If a Market Participant submits a revised notice of a proposed Planned

 Outage to System Management for a Self-Scheduling Outage Facility in accordance with clause 3.18.2A(g) that proposes:
 - i. a new start time for the proposed Planned Outage that is earlier
 than the previous proposed start time;
 - ii. a new end time for the proposed Planned Outage that is later than the previous proposed end time; or
 - iii. an increase in the quantity of de-rating,

then for the purposes of the Market Rules the original notice is deemed to be withdrawn and the revised notice is deemed to be a new notice submitted under clause 3.18.2A(b).

3.18.3.

- (a) If a Market Participant's or Network Operator's Facility (or an item of equipment forming part of a Facility or an item of equipment which is a generation system to which clause 2.30B.2(a) relates) is on the list described in clause 3.18.2(a) Equipment List, then the Market Participant or Network Operator may request that the Economic Regulation Authority reassess the inclusion of the Facility or item of equipment on the list Equipment List in accordance with this clause 3.18.3.
- (b) Following a request by a Market Participant or Network Operator under clause 3.18.3(a), the Economic Regulation Authority must consult with System Management and the Market Participant or Network Operator

- concerning whether the Facility or item of equipment Equipment List Facility should remain on the list Equipment List.
- (c) <u>The Economic Regulation Authority may give a direction to System</u>
 Management that a Facility or item of equipment an Equipment List Facility should not remain on the list Equipment List where it finds that:
 - i. System Management has not followed the Market Rules or the Power System Operation Procedure in compiling determining the list under clause 3.18.2 Equipment List; and
 - ii. if the Market Rules and the Power System Operation Procedure had been followed, then the Facility or item of equipment Equipment List Facility would not have been on the list Equipment List.
- (d) WhereIf the Economic Regulation Authority gives a direction to System Management that the Facility or item of equipment does not need to remain on the list, under clause 3.18.3(c), then System Management must remove the Facility or item relevant Equipment List Facility from the list Equipment List.
- 3.18.4. System Management must maintain an outage schedule, containing information on all Scheduled Outages.
- 3.18.4. System Management must maintain an outage schedule that contains details of each Outage Plan:
 - (a) that System Management has accepted under clause 3.18.13; or
 - (b) that the Economic Regulation Authority has directed System Management to include in the outage schedule, under clause 3.18.15(f).
- 3.18.4A. A proposal submitted to System Management in accordance with this-clause section 3.18 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 some or all of the capacity or capability of an Equipment List Facility to be unavailable for service for a period is a proposed outage plan ("Outage Plan").
- 3.18.5. Market Participants:
 - (a) must, subject to clause 3.18.5A, 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:
 - the outage relates to a Facility or item of equipment an Equipment
 <u>List Facility</u> in respect of which a Market Participant holds Capacity
 Credits at any time during the proposed outage;
 - ii. the Facility or item of equipment Equipment List Facility has a nameplate capacity greater than 10 MW; and
 - iii. the proposed outage has a duration of more than one week; and



- (b) otherwise may submit an Outage Plan to System Management not more than three years and not less than two days in advance of the proposed outage.
- 3.18.5A. Market Participants may submit an Outage Plan to which clause 3.18.5(a) relates to System Management less than one year, but not less than two days, in advance of the proposed outage, but in such instances:
 - (a) System Management must give priority to Outage Plans to which clause 3.18.5(a) relate 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 clause 3.18.5A relates in the order they are received; and
 - (c) System Management must give no special priority to Outage Plans to which this clause 3.18.5A relates relative to Outage Plans to which clause 3.18.5(a) does not relate.
- 3.18.5B. Network Operators may submit an Outage Plan to System Management not more than three years and not less than two days in advance of the proposed outage.
- 3.18.5C. Where a Network outage is likely to unduly impact the operation of one or more Market Participant Registered 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 Participant Registered Facilities.
- 3.18.5D Notwithstanding the requirements in chapter 10, in exercising the obligation set out in clause 3.18.5C, System Management may make such information in the outage schedule maintained in accordance with clause 3.18.4 available to a Network Operator to coordinate outage timing.
- 3.18.5D. Subject to clause 3.19.2G, a Market Participant or Network Operator must not submit an Outage Plan to System Management if it is aware or ought to be aware in the circumstances that, if System Management rejected the Outage Plan, any of the capacity or capability to which the Outage Plan applies would be unavailable for service for any part of the relevant outage period.
- 3.18.6. The information submitted in an Outage Plan must include:
 - (a) the identity of the <u>Facility or item of equipment Equipment List Facility</u> that will be unavailable;
 - (b) the quantity of any de-rating where, if the <u>Equipment List</u> Facility is a generating system, this quantity is in accordance with clause 3.21.5;
 - (c) the reason for the outage;
 - (d) the proposed start and end times of the outage;
 - (e) an assessment of risks that might extend the outage;



- (f) details of the time it would take the <u>Facility or item of equipment Equipment List Facility</u> to return to service, if required;
- (g) contingency plans for the early return to service of the Facility or item of equipment Equipment List Facility ("Outage Contingency Plans"); and
- (h) if the Outage Plan is submitted by a Network Operator, a confirmation that the Network Operator has used <u>its</u> best endeavours to inform any Market Generator with a Scheduled Generator or Non-Scheduled Generator impacted by the unavailability of the relevant <u>item of equipment Equipment List Facility</u> of the proposed outage.
- 3.18.6A. A Market Participant or Network Operator must not submit an Outage Plan if it is aware or ought to have been aware in the circumstances that it will not be possible to complete the proposed maintenance and make the relevant capacity or capability available for service by the end of the proposed outage period.
- 3.18.7. 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 that the relevant capacity or capability of its Equipment List Facility will be unavailable for service for the duration of the outage period described in clause 3.18.6(d) for the purpose of maintenance.
- 3.18.7A. 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.
- 3.18.8. Where a Market Participant or Network Operator no longer—plans to remove from service, or de-rate, the relevant Facility or item of equipment, for maintenance intends that the relevant capacity or capability of its Equipment List Facility will be unavailable for service for the purpose of maintenance it must inform System Management and withdraw the relevant Outage Plan as soon as practicable.
- 3.18.9. 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. If a Market Participant or Network Operator becomes aware of any changes to the information provided to System Management in an Outage Plan, then the Market Participant or Network Operator must as soon as practicable submit a revised Outage Plan to System Management for the relevant Equipment List Facility that complies with the requirements of an Outage Plan in this section 3.18.
- 3.18.9A. If a Market Participant or Network Operator submits a revised Outage Plan in accordance with clause 3.18.9 to System Management that proposes:
 - (a) a new start time for the proposed outage that is earlier than the previous proposed start time;



- (b) a new end time for the proposed outage that is later than the previous proposed end time; or
- (c) an increase in the quantity of de-rating,

then for the purposes of the Market Rules the original Outage Plan is deemed to be withdrawn and the revised Outage Plan is deemed to be a new Outage Plan.

- 3.18.9B. Subject to clauses 3.18.9C and 3.19.2G, if a Market Participant or Network

 Operator becomes aware, or ought to have become aware in the circumstances, that, if System Management rejected an Outage Plan for its Equipment List

 Facility, any of the capacity or capability to which the Outage Plan applies would be unavailable for service for any part of the proposed outage period, then the Market Participant or Network Operator must either:
 - (a) as soon as practicable, submit a revised Outage Plan to System

 Management for the Equipment List Facility that amends the proposed outage period or reduces the quantity of de-rating (or both) to meet the requirements of clause 3.18.5D; or
 - (b) as soon as practicable:
 - i. notify System Management; and
 - ii. if System Management has not yet scheduled the Outage Plan for the Equipment List Facility in its outage schedule, withdraw the Outage Plan.
- 3.18.9C. A Market Participant or Network Operator is not required to comply with clause 3.18.9B in respect of an Outage Plan if:
 - (a) the Outage Plan has been scheduled in System Management's outage schedule;
 - (b) the outage could have been brought forward at the time the Outage Plan was scheduled in System Management's outage schedule, if System Management had rejected the Outage Plan; and
 - (c) the only reason why, if System Management now rejected the Outage Plan, any of the capacity or capability to which the Outage Plan applies would be unavailable for service for any part of the proposed outage period is that there is no longer time to bring forward the outage.
- 3.18.10. <u>Subject to clauses 3.18.10A and 3.18.10B</u>, System Management must use a risk assessment process using the criteria set out in clause 3.18.11 to evaluate Outage Plans:
 - (a) when an Outage Plan is received or revised; and
 - (b) on an ongoing basis as part of the Medium Term PASA and Short Term PASA studies.
- 3.18.10A. Subject to clause 3.19.2G, System Management must not schedule a new Outage Plan in its outage schedule if it is aware or ought to be aware in the circumstances



that, if it rejected the Outage Plan, any of the capacity or capability to which the Outage Plan applies would be unavailable for service for any part of the proposed outage period.

3.18.10B.If, at the time System Management begins its evaluation of a new Outage Plan:

- (a) the relevant capacity or capability is subject to a Planned Outage for which System Management has received a notification under clauses 3.18.9B(b)(i) or 3.19.2F(b)(i);
- (b) the relevant capacity or capability is subject to a Planned Outage for which

 System Management is otherwise aware that it should have received a

 notification under clauses 3.18.9B(b)(i) or 3.19.2F(b)(i) from the Market

 Participant or Network Operator; or
- (c) the relevant capacity or capability is subject to a Forced Outage,
 then System Management must delay its evaluation of the Outage Plan until:
- (d) the relevant capacity or capability is returned to service; or
- (e) System Management receives evidence to its satisfaction from the Market
 Participant or Network Operator that the relevant capacity or capability
 would be capable of being made available for service before the start of the
 proposed outage period in the Outage Plan.
- 3.18.11. System Management must apply the following criteria when evaluating Outage Plans:
 - (a) the capacity of the total generation and Demand Side Management Facilities remaining in service must be greater than the second deviation load forecast published in accordance with clause 3.16.9(a)(iii) or clause 3.17.9(a)(iii), as applicable;
 - (aA) the total capacity of the generation Facilities remaining in service, and System Management's reasonable forecast of the total available Demand Side Management, must satisfy the Ready Reserve Standard described in clause 3.18.11A;
 - (b) the transmission <u>system and distribution system</u> capacity remaining in service must be capable of allowing the dispatch of the capacity referred to in clause 3.18.11(a);
 - (c) the Facilities remaining in service must be capable of meeting the applicable Ancillary Service Requirements;
 - (d) the Facilities remaining in service must allow System Management to ensure the power system is operated within the Technical Envelope; and
 - (e) notwithstanding the criteria set out in clause 3.18.11(a) to (d), 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.



- 3.18.11A. The Ready Reserve Standard requires that the available generation and demandside capacity at any time satisfies the following principles:
 - (a) Subject to clause 3.18.11A(c), the additional energy available within fifteen minutes must be sufficient to cover:
 - 30% of the total output, including Parasitic Load, of the generation unit synchronized to the SWIS with the highest total output at that time;
 - ii. plus the Minimum Frequency Keeping Capacity as defined in clause 3.10.1(a).
 - (b) Subject to clause 3.18.11A(c), and in addition to the additional energy described in clause 3.18.11A(a), the additional energy available within four hours must be sufficient to cover:
 - 70% of the total output, including Parasitic Load, of the generation unit synchronized to the SWIS with the second highest total output at that time;
 - ii. less the Minimum Frequency Keeping Capacity as defined in clause 3.10.1(a).
 - (c) System Management may relax the requirements in clause 3.18.11A(a) and (b) in the following circumstances:
 - i. where System Management expects that the load demand will be such that it exceeds the second standard deviation peak load forecast level, as described in clause 3.17.9(a), used in the most recently published Short Term PASA for that Trading Interval;
 - ii. during the four hours following an event that has caused System Management to call on additional energy maintained in accordance with clauses 3.18.11A(a) or (b).
- 3.18.12. Except to the extent required by the criteria in clause 3.18.11 and to the extent allowed by clause 3.18.5A, in evaluating Outage Plans, System Management must not show bias towards a Market Participant or Network Operator in regard to its Outage Plans.
- 3.18.13. 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:
 - (a) 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. 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.
 - (b) Where System Management finds that an Outage Plan is acceptable, then it must schedule the Outage Plan in System Management's outage



- schedule accordingly and inform the Market Participants or Network Operators that submitted the Outage Plans.
- (c) 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. System Management must:
 - consult with the Market Participant or Network Operator about those circumstances:
 - ii. determine a date by which it expects to have sufficient information on those circumstances to reassess the Outage Plan;
 - iii. inform the Market Participant or Network Operator of the date; and
 - iv. reassess the outage plan using the criteria under clause 3.18.11 following the date specified in accordance with clause 3.18.13(c)(ii);
- (d) Where System Management finds that an Outage Plan is unacceptable, then System Management must inform all Market Participants and Network Operators affected and must negotiate with the affected Market Participants and Network Operators to attempt to reach agreement as to System Management's outage schedule, and:
 - If agreement is reached, then the affected Market Participants and Network Operators must resubmit Outage Plans to System Management; or
 - ii. If no agreement is reached within 15 Business Days, System Management must:
 - 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;
 - 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
 - 3. notify each affected Market Participant whether its Outage Plan has been scheduled.
- (e) Where, as a result of an evaluation, the status of an Outage Plan that was previously acceptable or acceptable under certain conditions changes then System Management must modify its outage schedule accordingly.
- 3.18.14. System Management must use the following criteria when making a decision referred to in clause 3.18.13(d)(ii), in descending order of priority:
 - (a) System Management must give priority to the criteria in clause 3.18.11;



- (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. For the purposes of this clause an Outage Plan which has been entered into the outage schedule and has subsequently been revised in accordance with clause 3.18.9 is considered to have been entered into the schedule on the date the most recent revision of the Outage Plan was submitted under that clause;
- (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 or capability that would be taken out of service and the duration of the outage.
- 3.18.15. Where System Management informs a Market Participant or Network Operator that an Outage Plan has not been scheduled or has been removed from System Management's outage schedule under clause 3.18.13(d)(ii), the Market Participant or Network Operator may apply to the Economic Regulation Authority to reassess the decision in accordance with the following procedures:
 - (a) A Participant or Network Operator can only apply for the Economic Regulation Authority to reassess a decision on the grounds that System Management has not followed the Market Rules or its Power System Operation Procedure;
 - (b) The Market Participant or Network Operator must submit a written application to the Economic Regulation Authority, and forward a copy to System Management, stating the reasons why it considers that System Management's decision under clause 3.18.13(d)(ii) should be reassessed and providing any supporting evidence:
 - i. within ten Business Days of being informed of System Management's decision; and
 - ii. no later than five Business Days prior to the date when the outage would have commenced.
 - (c) Until the Economic Regulation Authority 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.
 - (d) System Management must submit records relating to System Management's outage schedule around the date of the relevant outage to <a href="the-example to the-example to the the-example to the-example to the the-example to the-example to the the-example to the-example to the the-example to the the-exa



- (e) <u>The Economic Regulation Authority must consult with System Management</u> and the Market Participant or Network Operator concerning the Outage Plan, and must make a complete reassessment by the earlier of:
 - ten Business Days of receiving the application under paragraph (b);
 or
 - ii. two Business Days prior to the date when the outage would have commenced.
- (f) The Economic Regulation Authority may give a direction to System Management that the Outage Plan should be scheduled in System Management's outage schedule where it finds that:
 - System Management has not followed the Market Rules or its Power System Operation Procedure; and
 - ii. if the Market Rules and the Power System Operation Procedure had been followed, then the Outage Plan would have been scheduled; and
- (g) Where the Economic Regulation Authority gives a direction to System Management that the Outage Plan should be scheduled in System Management's outage schedule, System Management must schedule it into the outage schedule in accordance with the direction.
- 3.18.16. Where System Management informs a Market Participant or Network Operator that an Outage Plan is unacceptable, and the Economic Regulation Authority does not give System Management a direction under clause 3.18.15(f), 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 in its outage schedule.
- 3.18.17. System Management must keep records of all of its outage evaluations and decisions made in accordance with this clause 3.18, together with the reasons for each outage evaluation and decision.
- 3.18.18. From time to time, and at least once in every five year period starting from Energy Market Commencement, the Economic Regulation Authority, with the assistance of System Management, must conduct a review of the outage planning process against the Wholesale Market Objectives. The review must include a technical study of the effectiveness of the criteria in clause 3.18.11 and a broad consultation process with Rule Participants.
- 3.18.19. At the conclusion of a review under clause 3.18.18, the Economic Regulation Authority must publish a report containing:
 - (a) the inputs and results of the technical study;
 - (b) the submissions made by Rule Participants in the consultation process and any responses to issues raised in those submissions;



- (c) any recommended changes to the outage planning process, formulated as one or more Market Rule changes or Market Procedure changes.
- 3.18.20. If the Economic Regulation Authority recommends any changes in the report in clause 3.18.19, the Economic Regulation Authority must either submit a Rule Change Proposal in accordance with clause 2.5.1 or initiate a Procedure Change Process in accordance with clause 2.10, as the case may be.
- 3.18.21. System Management must document the procedure it follows in conducting outage planning in the Power System Operation Procedure and System Management, Market Participants and Network Operators must follow that documented Market Procedure when planning outages.

3.19. Outage Approval

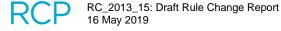
- 3.19.1. No later than two days prior to the date of commencement of any outage

 ("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 which the Scheduled Outage will occur.
- 3.19.1. No later than 10:00 AM on the day prior to the Scheduling Day for the Trading Day in which a Scheduled Outage is due to commence, the relevant Market Participant or Network Operator must request that System Management approve the Scheduled Outage to proceed.
- 3.19.2. Subject to clause 3.19.2B, Market Participants and Network Operators may request that System Management approve an outage of a Facility or item of equipment an Equipment List Facility that is not a Scheduled Outage ("Opportunistic Maintenance") to be carried out during a Trading Day,:
 - (a) at any time between 10:00 AM on the day prior to the Scheduling Day and 10:00 AM on the Scheduling Day for that Trading Day, where the request relates to an outage to occur at any time and for any duration during the following Trading Day; or
 - (a) at any time between:
 - i. 10:00 AM on the day prior to the Scheduling Day for the Trading

 Day in which the requested outage is due to commence; and
 - ii. 30 minutes before Balancing Gate Closure for the Trading Interval in which the requested outage is due to commence, and
 - (b) 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:
 - the <u>requested</u> outage <u>must be is</u> to allow <u>minor</u> maintenance to be performed;



- ii. the outage must not require any changes in scheduled energy or ancillary services; and
- iii. the outage may be for any duration and must end before the end of the Trading Day;
- ii. the duration of the requested outage will not exceed 24 hours;
- iii. the outage period is separated by at least 24 hours from any other

 Opportunistic Maintenance outage period for the Equipment List

 Facility; and
- iv. the request includes all of the information specified in clause 3.18.6.

where the request must include all of the information specified in clause 3.18.6, and must specify the Trading Intervals during which the Opportunistic Maintenance will occur.

3.19.2A. If:

- (a) a Market Participant or Network Operator intends that some or all of an Equipment List Facility's capacity or capability will be unavailable for service for a period for the purpose of maintenance; and
- (b) the Market Participant or Network Operator is not aware that the Equipment List Facility's capacity or capability would not otherwise be available for service for the duration of the proposed outage.
- then the Market Participant or Network Operator must request approval for a Scheduled Outage or Opportunistic Maintenance from System Management in accordance with section 3.18 and this section 3.19.
- 3.19.2B. Subject to clause 3.19.2G, a Market Participant or Network Operator must not request approval of Opportunistic Maintenance under clause 3.19.2 if the Market Participant or Network Operator is aware or ought to be aware in the circumstances that, if System Management rejected the request, any of the capacity or capability to which the request applies would be unavailable for service for any part of the relevant outage period.
- 3.19.2C. Where a Market Participant or Network Operator no longer intends to proceed with Opportunistic Maintenance that was requested under this section 3.19, it must inform System Management and withdraw the request as soon as practicable.
- 3.19.2D. If a Market Participant or Network Operator becomes aware of any changes to the information provided to System Management in a request for approval of Opportunistic Maintenance, then the Market Participant or Network Operator must submit a revised request to System Management for the relevant Equipment List Facility as soon as practicable in accordance with the requirements of a request for approval of Opportunistic Maintenance in this section 3.19.
- 3.19.2E. If a Market Participant or Network Operator submits a revised request for approval of Opportunistic Maintenance in accordance with clause 3.19.2D that proposes:



- (a) a new start time for the Opportunistic Maintenance that is earlier than the previous proposed start time;
- (b) a new end time for the Opportunistic Maintenance that is later than the previous proposed end time; or
- (c) an increase in the quantity of de-rating,

then for the purposes of the Market Rules the original request is deemed to be withdrawn and the revised request is deemed to be a new request.

- 3.19.2F. Subject to clause 3.19.2G, if a Market Participant or Network Operator becomes aware, or ought to have become aware in the circumstances, that, if System Management rejected a request for approval of Opportunistic Maintenance for its Equipment List Facility, any of the capacity or capability to which the request applies would be unavailable for service for any part of the proposed outage period, then the Market Participant or Network Operator must either:
 - (a) as soon as practicable, submit a revised request to System Management for the Equipment List Facility that amends the proposed outage period or reduces the quantity of de-rating (or both) to meet the requirements of clause 3.19.2B; or
 - (b) as soon as practicable:
 - i. notify System Management; and
 - ii. withdraw the request for approval of Opportunistic Maintenance if System Management has not yet approved it.
- 3.19.2G. Clauses 3.18.2A(b)(ii), 3.18.5D, 3.18.9B, 3.18.10A, 3.19.2B, 3.19.2F and 3.19.3B do not apply where:
 - (a) the proposed Planned Outage will immediately follow a Planned Outage of the relevant capacity or capability, and System Management has not received a notification under clauses 3.18.9B(b)(i) or 3.19.2F(b)(i) in respect of the earlier Planned Outage; or
 - (b) the Market Participant or Network Operator reasonably expects that the relevant capacity or capability would be subject to a Consequential Outage if the proposed Planned Outage did not proceed.
- 3.19.2H. If, at the time a Market Generator submits a request for approval of Opportunistic

 Maintenance for a Scheduled Generator:
 - (a) the Facility is not synchronised; and
 - (b) the proposed start time for the maintenance work that is the subject of the request is before the time when the Facility could be synchronised in accordance with its relevant Equipment Limits.

then the Market Generator may exclude from the start of the proposed outage period in its request any Trading Intervals during which the Facility could not be



synchronised in accordance with its Equipment Limits, provided that the Market Generator:

- (c) does not start the maintenance work that is the subject of the request until the request is approved by System Management; and
- (d) immediately withdraws the request if System Management has not approved the request prior to the Trading Interval in which the maintenance work that is the subject of the request is intended to commence.
- 3.19.3. Subject to clauses 3.19.3A, 3.19.3B and 3.19.3C, System Management must assess the request for approval of a Scheduled Outage or Opportunistic Maintenance, based on the information available to System Management at the time of the assessment, and applying the criteria set out in clause 3.19.6.
- 3.19.3A. In assessing whether to grant a request for Opportunistic Maintenance, System Management:
 - (a) must not grant permission for Opportunistic Maintenance to begin prior to the first Trading Interval for which Opportunistic Maintenance is requested;
 and
 - (b) [Blank]must not approve Opportunistic Maintenance for a Facility or item of equipment on two consecutive Trading Days;
 - (c) [Blank] 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 Capacity Cost Refunds as described in clause 4.26 rather than to perform maintenance; and
 - (d) may decline to approve Opportunistic Maintenance for a facility where it considers that inadequate time is available before the proposed commencement time of the outage to adequately assess the impact of that outage.
- 3.19.3B. Subject to clause 3.19.2G, System Management must not approve an

 Opportunistic Maintenance request for an Equipment List Facility if it is aware or
 ought to be aware in the circumstances that, if it rejected the request, any of the
 capacity or capability to which the request applies would be unavailable for service
 for any part of the proposed outage period.
- 3.19.3C. If, at the time a Market Participant or Network Operator submits a request for approval of Opportunistic Maintenance under clause 3.19.2:
 - (a) the relevant capacity or capability is subject to a Planned Outage for which System Management has received a notification under clauses 3.18.9B(b)(i) or 3.19.2F(b)(i);
 - (b) the relevant capacity or capability is subject to a Planned Outage for which

 System Management is otherwise aware that it should have received a

 notification under clauses 3.18.9B(b)(i) or 3.19.2F(b)(i) from the Market

 Participant or Network Operator; or



- (c) the relevant capacity or capability is subject to a Forced Outage, then System Management must delay its assessment of the request until:
- (d) the relevant capacity or capability becomes available for service; or
- (e) System Management receives evidence to its satisfaction from the Market

 Participant or Network Operator that the relevant capacity or capability

 would be capable of being made available for service before the start of the proposed Opportunistic Maintenance.
- 3.19.4. System Management must either approve or reject the Scheduled Outage or Opportunistic Maintenance and inform the Market Participant or Network Operator of its decision as soon as practicable.
- 3.19.4A. If System Management does not provide a Market Participant or Network Operator with its decision on a request for approval of a Scheduled Outage or Opportunistic Maintenance:
 - (a) for Scheduled Outages, by 2:00 PM on the day prior to the Scheduling Day for the Trading Day in which the Scheduled Outage is proposed to commence; or
 - (b) for Opportunistic Maintenance, by 30 minutes before Balancing Gate
 Closure for the Trading Interval during which the Opportunistic
 Maintenance is proposed to commence,
 - then, for the purposes of the Market Rules, the request for approval of the Scheduled Outage or Opportunistic Maintenance is deemed to be rejected.
- 3.19.5. Where a change in power system conditions after System Management has approved a Scheduled Outage or Opportunistic Maintenance means that the Scheduled Outage or Opportunistic Maintenance is no longer approvable applying the criteria in clause 3.19.6, System Management may decide to reject the Scheduled Outage or Opportunistic Maintenance. Where System Management makes such a decision, it must inform the relevant Market Participant or Network Operator of its decision immediately.
- 3.19.6. System Management must use the following criteria when considering approval of Scheduled Outages or Opportunistic Maintenance:
 - (a) the capacity of the generation Facilities remaining in service, and System Management's reasonable forecast of the total available Demand Side Management, must be greater than the load forecast for the relevant time period;
 - (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 ensure the power system is operated within the Technical Envelope;



- (d) where a group of outages when considered together, do not meet the criteria set out in clause 3.19.6(a) to (c), 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 in accordance with clauses 3.19.4 or 3.19.5, 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 in accordance with clause 3.19.4 or 3.19.5, but were originally scheduled in System Management's outage schedule less than one month ahead; then
 - v. to Opportunistic Maintenance; and
- (e) notwithstanding the criteria set out in clause 3.19.6(a) to (d), 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.
- 3.19.7. 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.
- 3.19.8. Subject to clause 3.19.9, 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.
- 3.19.9. Compliance with clause 3.19.8 is not required if such compliance would endanger the safety of any person, damage equipment, or violate any applicable law. Where a Rule Participant cannot comply with such a decision it must inform System Management as soon as practicable.
- 3.19.10. Where a Market Participant or Network Operator has reason to believe that System Management has not followed the Market Rules or the Power System Operation Procedure in its decision to reject an outage it may report the decision to the Economic Regulation Authority as a potential breach of the Market Rules in accordance with clause 2.13.4.
- 3.19.11. An outage, including Opportunistic Maintenance, that is approved by System Management under clause 3.19.4 is a Planned Outage.

- 3.19.11. An outage, including a Scheduled Outage or Opportunistic Maintenance, is a Planned Outage if it is:
 - (a) approved by System Management under clause 3.19.4; or
 - (b) deemed to be approved by System Management under clause 3.18.2A(e).

3.19.12.

(a) Where, under clause 3.19.5, System Management informs a Market Participant or Network Operator that an Outage Plan previously scheduled in System Management's outage schedule is rejected within 48 hours of the time when the outage would have commenced in accordance with the Outage Plan, the Market Participant or Network Operator may apply to AEMO for compensation.

. . .

(d) The Market Participant or Network Operator must submit a written request for compensation to AEMO within three months of System Management's decision, including invoices and other documents demonstrating the costs referred to in-paragraph (b) clause 3.19.12(b).

. . .

- 3.19.13. System Management must keep records of all of its outage evaluations and decisions made in accordance with this clause 3.19, together with the reasons for each outage evaluation and decision.
- 3.19.14. System Management must document the procedure it follows in conducting final approval of outages in the Power System Operation Procedure and System Management, Market Participants and Network Operators must follow that documented Market Procedure when conducting final approval of outages.
- 3.20. Outage Recall
- 3.20.1. Where the SWIS is in an Emergency Operating State, or High Risk Operating State, System Management may direct a Market Participant or Network Operator <a href="https://doi.org/to.com/that-a-Facility-or-item-of-equipment-be-returned_to-return-an-Equipment_List Facility-to-service from a-Planned Outages in accordance with the relevant Outage Contingency Plan, or take other measures contained in the relevant Outage Contingency Plan.
- 3.20.2. Subject to clause 3.20.3, Market Participants and Network Operators must comply with directions from System Management under clause 3.20.1.
- 3.20.3. Rule Participants are not required to comply with directions issued by System Management under clause 3.20.1 if such compliance would endanger the safety of any person, damage equipment, or violate any applicable law. Where a Rule Participant cannot comply with such a direction it must inform System Management as soon as practicable.



. . .

3.21A.14. A Commissioning Test under an approved Commissioning Test Plan for an Outage
Facility may cover periods in which some or all of the capacity or capability of the
Outage Facility is subject to a Planned Outage or Forced Outage.[Blank]

. . .

- 7.1. Data Used in the Non-Balancing and Out of Merit Dispatch Process
- 7.1.1. System Management must maintain and, in accordance with section 7.6, use the following data set when issuing Dispatch Instructions to Demand Side Programmes, when issuing Dispatch Instructions to Balancing Facilities dispatched Out of Merit, and when providing Operating Instructions:
 - (a) Standing Data for Registered Facilities determined in accordance with section 2.34:
 - (b) Loss Factors determined in accordance with section 2.27;
 - expected Scheduled Generator and Non-Scheduled Generator capacities by Trading Interval determined in accordance with clauses 3.17.5, 3.17.6 and 3.17.8;
 - (d) transmission network configuration and capacity by Trading Interval determined in accordance with clauses 3.17.5, 3.17.6 and 3.17.8;
 - (e) forecasts of load and non-scheduled generation by Trading Interval determined in accordance with section 7.2;
 - (f) Ancillary Service Requirements for each Trading Interval determined in accordance with clause 7.2.4;
 - (g) schedules of approved Planned Outages for generating works and transmission equipment by Trading Interval determined in accordance with section 3.19:
 - transmission-Forced Outages and Consequential Outages by Trading
 Interval received from Network Operators in accordance with section 3.21;
 - Scheduled Generator, Non–Scheduled Generator and Interruptible Load Forced Outages and Consequential Outages by Trading Interval received from Market Participants in accordance with section 3.21;
 - (j) [Blank]
 - (k) the Non-Balancing Dispatch Merit Order;
 - (I) Supplementary Capacity Contract data, if any; and
 - (m) Network Control Service Contract data, if any, received from a Network Operator in accordance with clauses 5.3A.3 and 5.3A.4.

. . .

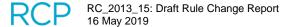
7A.2. Balancing Submissions

- 7A.2.1. A Market Participant must at all times ensure that it has made a Balancing Submission in accordance with clause 7A.2.4 for each Trading Interval in the Balancing Horizon for each of its Balancing Facilities.
- 7A.2.2. A Market Participant may submit a subsequent Balancing Submission in accordance with clause 7A.2.4 in respect of any of its Balancing Facilities, excluding Facilities in the Balancing Portfolio, and:
 - (a) the Balancing Submission may be for one or more Trading Intervals in the Balancing Horizon; and
 - (b) the Balancing Submission must be made before Balancing Gate Closure for any Trading Interval in the submission.
- 7A.2.3. A Market Participant with a Balancing Facility that is:
 - (a) the subject of an Operating Instruction; or
 - (b) undergoing a Test that has an approved Test Plan,

must ensure that a Balancing Submission submitted under this section 7A.2 is consistent with the proposed operation of the Balancing Facility for each Trading Interval specified in the Operating Instruction or the Test Plan. The provisions of this clause 7A.2.3 do not apply to the Balancing Portfolio.

7A.2.4. A Balancing Submission must:

- (a) be in the manner and form prescribed and published by AEMO:
- (b) constitute a declaration by an Authorised Officer;
- (c) have Balancing Price-Quantity Pair prices within the Price Caps;
- specify, for each Trading Interval covered in the Balancing Submission, whether the Balancing Facility is to use Liquid Fuel or Non-Liquid Fuel;
- (e) specify the Ramp Rate Limit or the Portfolio Ramp Rate Limit (as applicable) for each Trading Interval covered in the Balancing Submission; and
- (f) specify the available capacity and the unavailable capacity as determined under clause 7A.2.4A, 7A.2.4B or 7A.2.4C (as applicable) for each Trading Interval covered in the Balancing Submission.
- 7A.2.4A. A Balancing Submission for a Balancing Facility that is a Scheduled Generator must specify the following details for each Trading Interval covered in the Balancing Submission:
 - (a) a ranking of Balancing Price-Quantity Pairs covering available capacity;
 and
 - (b) a declaration of the MW quantity that will be unavailable for dispatch, where the sum of:



- (c) the quantities in the Balancing Price-Quantity Pairs; and
- (d) the declared MW quantity of unavailable capacity, must be equal to the Scheduled Generator's Sent Out Capacity.
- 7A.2.4B. A Balancing Submission for a Balancing Facility that is a Non-Scheduled Generator must specify, for each Trading Interval covered in the Balancing Submission, a single Balancing Price-Quantity Pair with a MW quantity equal to the Market Participant's best estimate of the Facility's output at the end of the Trading Interval (based on an assumption, for the purposes of this clause 7A.2.4B, that the Facility will not be subject to a Dispatch Instruction that limits its output during that Trading Interval).
- 7A.2.4C. A Balancing Submission for the Balancing Portfolio must specify the following details for each Trading Interval covered in the Balancing Submission:
 - (a) a ranking of Balancing Price-Quantity Pairs covering available capacity in the Balancing Portfolio; and
 - (b) a declaration of the MW quantity of <u>capacity of Scheduled Generators in</u> the Balancing Portfolio that will be unavailable for dispatch (excluding any unavailable capacity to the extent that it relates to a temporary limitation in the intermittent energy source used by a Non-Scheduled Generator in the Balancing Portfolio to generate electrical energy).
- 7A.2.5. For the purposes of clause 7A.2.4(b), where AEMO accepts a Balancing Submission from a Market Participant that complies with clause 7A.2.4(a), the submission will be deemed to constitute a declaration by an Authorised Officer of the Market Participant.
- 7A.2.6. A subsequent Balancing Submission made under clauses 7A.2.2, 7A.2.9(d), 7A.2.9(e), or 7A.2.9(f), 7A.2.9B, 7A.2.9C, 7A.2.10 or 7A.3.5 in respect of the same Balancing Facility covering the same Trading Interval as an earlier Balancing Submission, overrides the earlier Balancing Submission for, and has effect in relation to, that Trading Interval.
- 7A.2.7. Where a subsequent Balancing Submission is made under clause 7A.2.6, a
 Market Participant must create and maintain internal records of the reasons for
 submitting the subsequent Balancing Submission, including details of any changed
 circumstances and the impacts of those circumstances that gave rise to the new
 Balancing Submission.

The originally proposed change to clause 7A.2.8(b) (to make that clause subject to clause 7A.2.9A(b)) is no longer required because the RC_2014_06 version of the clause no longer applies to the Balancing Portfolio and so the qualification is no longer required.

7A.2.8. A Market Participant (other than Synergy in relation to the Balancing Portfolio) must ensure that, for each Trading Interval in the Balancing Horizon for which Balancing Gate Closure has not occurred, its most recently submitted Balancing

Submission in respect of its Balancing Facility and that Trading Interval accurately reflects:

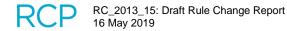
- (a) all information reasonably available to the Market Participant, including Balancing Forecasts published by AEMO, the information provided by AEMO under clause 7A.3.1(c) and the latest information available to it in relation to any Internal Constraint or External Constraint;
- (b) the Market Participant's reasonable expectation of the capability of its Balancing Facilities to be dispatched in the Balancing Market; and
- (c) the price at which the Market Participant submitting the Balancing Submission intends to have the Balancing Facility participate in the Balancing Market.
- 7A.2.8A. A Market Participant (other than Synergy in respect of the Balancing Portfolio)

 must, for each of its Balancing Facilities, and for each Trading Interval in the

 Balancing Horizon, use its best endeavours to ensure that, at all times, any of the
 Facility's capacity that is:
 - (a) subject to an approved Planned Outage; or
 - (b) subject to an outstanding request for approval of Opportunistic Maintenance,

is declared as unavailable in the Balancing Submission for the Facility and the Trading Interval, unless the Balancing Facility is expected to generate in accordance with a Commissioning Test in that Trading Interval.

- 7A.2.9. Synergy, in relation to the Balancing Portfolio:
 - (a) must, subject to clauses 7A.2.9(d) to 7A.2.9(f), ensure that for each Trading Interval in the Balancing Horizon the most recently submitted Balancing Submission in respect of that Trading Interval accurately reflects:
 - all information reasonably available to Synergy, including Balancing Forecasts published by AEMO and the latest information available to Synergy in relation to any Forced Outage for a Facility in the Balancing Portfolio;
 - ii. <u>subject to clause 7A.2.9A(b)</u>, Synergy's reasonable expectation of the capability of its Balancing Portfolio to be dispatched in the Balancing Market for that Trading Interval; and
 - iii. the price at which Synergy intends to have the Balancing Portfolio participate in the Balancing Market;
 - (b) must indicate in a manner and form prescribed by AEMO:
 - i. which of the Balancing Price-Quantity Pairs that it has priced at the Minimum STEM Price are for Facilities that are to provide LFAS;
 - ii. which Facilities are likely to provide LFAS; and



- iii. for each completed Trading Interval, which Facilities actually provided the LFAS in the Trading Interval;
- (c) must:
 - ensure that quantities in the Balancing Price-Quantity Pairs in its Balancing Submissions that are required for the provision of Ancillary Services, other than LFAS, are priced at the Price Caps;
 - ii. advise AEMO in a manner and form prescribed by AEMO, the Facilities which are likely to provide the quantities specified in clause 7A.2.9(c)(i); and
 - iii. for each completed Trading Interval, advise AEMO which Facilities actually provided the Ancillary Services referred to in clause 7A.2.9(c)(i) in the Trading Interval;
- (d) may submit a new, updated Balancing Submission in relation to any Trading Interval in the Balancing Horizon for which Balancing Gate Closure is more than two hours in the future:
 - i. by submitting its updated Balancing Submission to AEMO immediately before 1:00 PM; or
 - ii. otherwise by submitting its updated Balancing Submission to AEMO within one hour after LFAS Gate Closure;
- (e) may submit a new, updated Balancing Submission in relation to any Trading Interval in the Balancing Horizon for which Balancing Gate Closure is more than two hours in the future if a Facility in the Balancing Portfolio has experienced a Forced Outage since the last Balancing Submission; and
- (f) may after the time specified in clause 7A.2.9(d), submit a new, updated Balancing Submission to reflect the impact of a Forced Outage which Synergy expects will cause a Facility to run on Liquid Fuel, where the Facility would not have run on Liquid Fuel but for the Forced Outage, in order to meet Synergy's Balancing Market obligations in relation to the Balancing Portfolio under this Chapter 7A-; and
- (g) must, as soon as it becomes aware that:
 - i. either:
 - a Facility in the Balancing Portfolio has experienced a Forced Outage; or
 - System Management has approved a request for Opportunistic Maintenance for a Facility in the Balancing Portfolio; and
 - ii. the outage will reduce the available capacity of the Balancing

 Portfolio in a Trading Interval in the Balancing Horizon from the
 quantity reported as available in the current Balancing Submission
 for that Trading Interval; and



- iii. there is a credible risk that representation of the relevant capacity as available in the Balancing Submission might, in the circumstances:
 - affect any expected EOI Quantity provided to another Market Participant for the Trading Interval under clause 7A.3.1(c); or
 - cause System Management to dispatch Balancing Facilities
 Out of Merit under clauses 7.6.1C(b) or 7.6.1C(c),

submit a new, updated Balancing Submission for the Trading Interval to:

- iv. make any relevant Scheduled Generator capacity subject to the outage unavailable; and
- v. unless otherwise permitted under clauses 7A.2.9(d) to 7A.2.9(f),
 remove or reduce the quantity of the highest price Balancing PriceQuantity Pair or Balancing Price-Quantity Pairs (excluding any
 Balancing Price-Quantity Pairs that are required to be offered at the
 Price Caps under clause 7A.2.9(c)) to remove the capacity subject
 to the outage from its Balancing Price-Quantity Pairs.

Amended proposed new clauses 7A.2.9A, 7A.2.9B and 7A.2.9C to reflect the merger of Verve Energy and Synergy.

- 7A.2.9A. Synergy must, to the extent it is able to update its Balancing Submissions subject to clauses 7A.2.9(d) to 7A.2.9(g) (as applicable), for each Scheduled Generator in the Balancing Portfolio, and for each Trading Interval in the Balancing Horizon, use its best endeavours to ensure that, at all times:
 - (a) any of the Scheduled Generator's capacity that is subject to an approved

 Planned Outage is declared as unavailable in the Balancing Submission for
 the Balancing Portfolio and that Trading Interval, except where that
 Scheduled Generator is expected to generate in accordance with a
 Commissioning Test; and
 - (b) any of the Scheduled Generator's capacity that is subject to an outstanding request for approval of Opportunistic Maintenance is declared as available in the Balancing Submission for the Balancing Portfolio and that Trading Interval.
- 7A.2.9B. If System Management rejects a previously approved Planned Outage of a

 Balancing Facility (or a Facility in the Balancing Portfolio) under clause 3.19.5,
 then the relevant Market Participant must, as soon as practicable, update its
 Balancing Submission for any relevant Trading Intervals in the Balancing Horizon for which:
 - (a) the Market Participant can make the relevant capacity available for dispatch, taking into account any relevant Equipment Limits; and
 - (b) Balancing Gate Closure has not yet occurred,

to reflect that the capacity will not be subject to a Planned Outage in those Trading Intervals.



- 7A.2.9C. If System Management directs a Market Participant to return a Balancing Facility or a Facility in the Balancing Portfolio from a Planned Outage in accordance with an Outage Contingency Plan under clause 3.20.1, then the Market Participant must, as soon as practicable, update its Balancing Submission for any relevant Trading Intervals in the Balancing Horizon for which Balancing Gate Closure has not yet occurred, to reflect the impact of System Management's direction on the proposed end time of the Planned Outage.
- 7A.2.10. A Market Participant (other than Synergy in relation to the Balancing Portfolio) as soon as it becomes aware that a Balancing Submission for a Trading Interval for which Balancing Gate Closure has occurred is inaccurate:
 - (a) if the inaccuracy is due to an Internal Constraint, must make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the available Sent Out Capacity of that Facility and the Ramp Rate Limit is accurate but no prices are altered, in respect of that Trading Interval as soon as reasonably practicable;
 - (b) if the inaccuracy is due to an External Constraint, may make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the available Sent Out Capacity of that Facility and the Ramp Rate Limit is accurate but no prices are altered, in respect of that Trading Interval, as soon as reasonably practicable;
 - (c) if the inaccuracy is due to the Market Participant receiving an Operating Instruction, may make a new, accurate Balancing Submission that reflects the Operating Instruction; or
 - (d) if the inaccuracy is due to a variation of the availability of the intermittent energy source used by a Non-Scheduled Generator, may make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the Market Participant's best estimate of the Facility's output at the end of the Trading Interval and the Ramp Rate Limit is accurate but the price is not altered, in respect of that Trading Interval.
- 7A.2.10A. A Market Participant (other than Synergy in relation to the Balancing Portfolio) must not submit a new, updated Balancing Submission in respect of a Trading Interval for which Balancing Gate Closure has occurred except in accordance with clause 7A.2.10.
- 7A.2.11. Where a Market Participant has submitted a Balancing Submission in accordance with clauses 7A.2.10(a) or 7A.2.10(b) after Balancing Gate Closure, the Market Participant must, as soon as reasonably practicable, provide AEMO with written details of the nature of the Internal Constraint or External Constraint, when it occurred and its duration.
- 7A.2.12. Where Synergy has submitted an updated Balancing Submission for the Balancing Portfolio in accordance with clauses 7A.2.9(e) or 7A.2.9(f) because of a Forced Outage of one of the Facilities in the Balancing Portfolio after the time specified in



the applicable clause it must, as soon as reasonably practicable, provide AEMO with written details of:

- (a) the nature of the Forced Outage;
- (b) when the Forced Outage occurred;
- (c) the duration of the Forced Outage; and
- (d) information substantiating the commercial impact, if any, of the Forced Outage.

7A.2.13. A Market Participant must:

- (a) make a Balancing Submission under this section 7A.2 in good faith;
- (b) not act in a manner that:
 - i. is intended to lead; or
 - ii. the Market Participant should have reasonably known is likely to lead,
 - to another Rule Participant being misled or deceived as to the existence or non-existence of a material fact relating to the Balancing Market; and
- (c) not include information in a Balancing Submission relating to prices for a purpose of influencing the determination of the Constrained Off Compensation Price, the Constrained Off Quantity which the Facility may provide, the Constrained On Compensation Price or the Constrained On Quantity which the Facility may provide.

. . .

7A.2A. Unavailable Capacity in a Balancing Submission

- 7A.2A.1. Subject to clauses 7A.2A.3 and 7A.2A.4, a Market Participant (other than Synergy in respect of the Balancing Portfolio) must, as soon as practicable after each Trading Interval, for each of its Balancing Facilities that is an Outage Facility, ensure that it has notified System Management of a Forced Outage or Consequential Outage that relates to any capacity for which the Market Participant holds Capacity Credits that:
 - (a) was declared unavailable in the Facility's Balancing Submission for that Trading Interval;
 - (b) was not subject to an approved Planned Outage, Consequential Outage or Commissioning Test Plan in that Trading Interval; and
 - (c) was not declared unavailable in the Facility's Balancing Submission

 because the Market Participant reasonably expected that its Reserve

 Capacity Obligations for the Trading Interval would be reduced because the maximum site temperature for the applicable Trading Day would exceed 41 degrees Celsius.



- 7A.2A.2. Subject to clauses 7A.2A.3 and 7A.2A.4, Synergy must, as soon as practicable after each Trading Interval, for each Facility in the Balancing Portfolio that is an Outage Facility, ensure that it has notified System Management of a Forced Outage or Consequential Outage that relates to any capacity for which Synergy holds Capacity Credits that:
 - (a) was declared unavailable in the Balancing Portfolio's Balancing Submission for that Trading Interval;
 - (b) was not subject to an approved Planned Outage, Consequential Outage or Commissioning Test Plan in that Trading Interval; and
 - (c) was not declared unavailable in the Balancing Portfolio's Balancing
 Submission because Synergy reasonably expected that its Reserve
 Capacity Obligations for the Trading Interval would be reduced because the
 maximum site temperature for the relevant Trading Day would exceed 41
 degrees Celsius.
- 7A.2A.3. Clauses 7A.2A.1 and 7A.2A.2 do not apply in respect of a Trading Interval if:
 - (a) the relevant capacity was previously subject to an approved Planned
 Outage for the Trading Interval; and
 - (b) System Management notified the Market Participant of the rejection of the Planned Outage under clause 3.19.5:
 - i. less than 30 minutes before Balancing Gate Closure for the Trading Interval; or
 - ii. at a time when the Facility was not synchronised and could not be synchronised by the start of the Trading Interval given the Facility's relevant Equipment Limits.
- 7A.2A.4. Clauses 7A.2A.1 and 7A.2A.2 do not apply in respect of a Trading Interval if:
 - (a) the relevant capacity was previously subject to an approved Consequential

 Outage or Commissioning Test Plan for the Trading Interval; and
 - (b) System Management notified the Market Participant that the capacity was no longer subject to the Consequential Outage or Commissioning Test Plan for the Trading Interval:
 - i. less than 30 minutes before:
 - 1. Balancing Gate Closure for the Trading Interval, for a Facility that is not in the Balancing Portfolio; or
 - the latest time specified in clause 7A.2.9(d) for the Trading
 Interval, for a Facility in the Balancing Portfolio; or
 - ii. at a time when the Facility was not synchronised and could not be synchronised by the start of the Trading Interval given the Facility's relevant Equipment Limits.

...



Glossary

Equipment List: Means the list maintained by System Management under clause 3.18.2(a).

Equipment List Facility: Means a Facility or item of equipment that is included on the Equipment List.

Outage Facility: Means an Equipment List Facility or a Self-Scheduling Outage Facility.

Scheduled Outages: Has the meaning given in clause 3.19.1. Means an outage that has an Outage Plan that is included in System Management's outage schedule.

Self-Scheduling Outage Facility: Has the meaning given in clause 3.18.2A(a).

. . .

Appendix A. Summary of Drafting Updates to Reflect Changes to the Market Rules since the Formal Submission of the Proposal

The Rule Change Panel has made the following changes to the proposed Amending Rules in the Rule Change Proposal to reflect the changes made to the Market Rules since the publication of the Rule Change Proposal.

Market Rule	Description of change	
3.4.1	Removed proposed amendment because it has already been made.	
3.18.2	Amended proposed changes to reflect the transfer of System Management functions to AEMO.	
3.18.4	Amended proposed changes to reflect the transfer of functions from the IMO to the ERA.	
7A.2.4, 7A.2.4A	Removed proposed amendments as they have already been made by RC_2014_06.	
7A.2.4B	Amended proposed changes to reflect the implementation of a variation of the clause by RC_2014_06.	
7A.2.4C	Removed proposed amendments as they have already been made by RC_2014_06.	
7A.2.8(b)	Remove proposed amendment to make the clause subject to clause 7A.2.9A(b) because the RC_2014_06 version of this clause no longer applies to the Balancing Portfolio, so the qualification is no longer required.	
7A.2.8A	Amended proposed clause to reflect the merger of Verve Energy and Synergy.	
7A.2.9	Amended proposed changes to reflect the changes made by RC_2014_06 and replace the defined term Balancing Portfolio Supply Curve, which is being deleted by RC_2014_06.	
7A.2.9A - 7A.2.9C 7A.2A.1 - 7A.2A.3	Amended proposed clauses to reflect the merger of Verve Energy and Synergy.	
Glossary: Balancing Portfolio Supply Curve	Removed proposed amendment as the definition has been removed by RC_2014_06.	

Appendix B. Responses to Submissions Received in the First Submission Period

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
Issue	1: Equipment Li	st: Demand Side Programmes and Associated Loads, Disp	atchable Loads and Interruptible Loads
1	Perth Energy	Perth Energy queries whether there may be some merit for System Management to have a less formal process to be informed of maintenance and other significant activities at major loads, such as commissioning of new machinery. For example, if System Management was aware that a load that normally consumes 20 MW is on a maintenance outage this may impact on System Management's decision to approve Opportunistic Maintenance for a generator.	The Rule Change Panel understands that System Management already receives such information on an informal basis for some major loads. Additionally, clause 3.17.5(c) allows System Management to require a Market Customer to provide it with information each week about the availability of its Interruptible Loads and Demand Side Programmes over the next Short Term PASA horizon, as well as demand forecasts for any other load facilities designated as significant by System Management.
Issue	2: Equipment Li	st: Network equipment	
2	Bluewaters	Bluewaters is not convinced the solution proposed by the IMO is optimal in terms of efficiently achieving the stated goals of the rule/outage process reform. The proposed solution still requires System Management to maintain an equipment list (additional administration) and yet System Management presumably must still communicate with generating facilities affected, such that they can curtail during the equipment outage. As such, those units should then lodge an outage (consequential) which is visible to, and easily understood by, Market Participants. In other words, it should suffice from an outcomes point of view that a generating facility forced to curtail due to a network equipment outage informs the market by lodging a	The Rule Change Panel sought clarification from Bluewaters regarding its views on Issue 2. In an email response sent on 12 February 2019, Bluewaters advised that its position had shifted since the first submission period. Having had experience with network outages in recent years, Bluewaters advised that it now supports the changes proposed by the IMO and considers that they are an improvement on the current rules. See section 6.3.1.2 of this report for further details.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		Consequential Outage (or a Planned Outage, later converted to consequential). This solution places less burden on System Management, while still keeping the energy market fully informed on generation impact. Bluewaters suggests the IMO consider reviewing the required Equipment List.	
3	Western Power	It is the Network Operator's view that any generation system with a nameplate capacity of less than 10 MW should not be included on the Equipment List. Western Power's particular concern is in relation to distribution facilities, which are generally connected to shared distribution networks. Inclusion of distribution system equipment (that could limit output of a generation system) on the Equipment List will present some challenges for the Network Operator to manage in the future. At this stage, it is unclear how the proposal (to include distribution equipment) will materially benefit the market and Western Power.	See section 6.3.1.2 of this report.
Issue	4: Balancing Sul	omission unavailability declarations	
4	Bluewaters	UNAV (i.e. the unavailable quantity in a Balancing Submission) should simply reflect any capacity that is not available for dispatch. The reason for that unavailability should be captured in additional processes, such as outage planning processes or the ancillary service processes.	The proposed Amending Rules are consistent with Bluewaters' suggestion.
5	Collgar	Collgar notes the following sentence from the Rule Change Proposal (last paragraph of page 7): "For a Non-Scheduled Generator, the 'available' quantity provided in its single Balancing Price-Quantity	The quantities in Balancing Price-Quantity Pairs for both Scheduled Generators and Non-Scheduled Generators represent MW output levels at the end of the relevant Trading Interval. This is consistent with the

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		Pair should reflect the Market Participant's estimate of its MW output at the end of the Trading Interval, assuming it is not dispatched down by System Management." Collgar interprets the sentence to mean that the output at the last second of the Trading Interval is required to be submitted. However, Collgar considers that the average output of the Trading Interval is much more meaningful.	operation of the Real-Time Dispatch Engine, which issues Dispatch Instructions to meet the forecast MW demand at the end of the Trading Interval. However, in the absence of better information, a Market Generator is likely to base its estimate of the output of its Non-Scheduled Generator at the end of Trading Interval on its estimate of the average output of the Facility over that Trading Interval.
Issue	6: Clarifications	of requirements for Balancing Facilities	
6	ERM Power	To the extent a unit returns to service prior to the end of a Planned Outage then its capacity should be allowed to return to the BMO as available. ERM Power suggests the following alternative drafting for proposed new clause 7A.2.8A: 7A.2.8A. A Market Participant (other than Verve Energy in respect of the Verve Energy Balancing Portfolio) must, for each of its Balancing Facilities, and for each Trading Interval in the Balancing Horizon, use its best endeavours to ensure that, at all times, any of the Facility's capacity that is: (a) subject to an approved Planned Outage; or (b) subject to an outstanding request for approval of a Planned Outage, is declared as unavailable in the Balancing Submission for the Facility and the Trading Interval, unless the Balancing Facility is undertaking a Commissioning Test	The Rule Change Panel agrees that a Market Generator should be able to end a Planned Outage early and return its Balancing Facility to the Balancing Market subject to the usual gate closure restrictions. However, the Rule Change Panel does not agree with ERM Power's alternative drafting. The Rule Change Panel considers that capacity should not be offered into the Balancing Market for a Trading Interval in which it is still subject to a Planned Outage, because: this would decrease transparency for other Market Participants who use outage information published on the Market Web Site for their own planning; and the capacity in question would (if it is assigned Capacity Credits) be allowed to participate in the Balancing Market without being subject to Capacity Cost Refunds. In practice, this means that a Market Generator should update SMMITS to bring forward its Planned Outage



Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		in that Trading Interval <u>or has returned to service earlier</u> than the end time of the Planned Outage.	end time before updating its Balancing Submissions to return the capacity to the Balancing Market.
7	Collgar	In relation to proposed clause 7A.2.8A, Collgar considers it unreasonable for a "Market Participant that wishes to make a request for Opportunistic Maintenance that covers Trading Intervals within the Balancing Horizon" to "amend its Balancing Submission to make the relevant capacity unavailable before it requests the outage", as the timeframes to lodge and approve Opportunistic Maintenance requests are already onerous. Collgar considers that once a Market Participant has lodged an Opportunistic Maintenance request, System Management has been notified of the potential unavailability. If the request is approved, the additional unavailability should automatically be reconciled by internal System Management systems. If this is not possible, Collgar suggests that Market Participants should only include unavailability if the outage has been approved. Collgar considers that additional complexity has been added for Market Participants through the proposed solution, as the process assumes the request will be approved and if the outcome is rejection, the Market Participant is required to amend its Balancing Submission again.	See section 6.3.2.3 of this report.
8	Collgar	Collgar notes in relation to proposed clause 7A.2A.1 that "as soon as practicable" has not been defined in the Market Rules.	The actual time period that is 'as soon as practicable' will vary depending on the specific action and circumstances, making an explicit Glossary definition inappropriate.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
			However, the Rule Change Panel agrees it may be beneficial to specify more explicit deadlines for reporting Forced and Consequential Outages in the Market Rules, and intends to consider the matter during its assessment of RC_2014_03, which focusses on Forced and Consequential Outage issues.
Issue	7: Clarification	of requirements for the Verve Energy Balancing Portfolio	
9	System Management	System Management notes that Synergy is not obliged to resubmit Balancing Submissions after its gate closure to reflect the impact of a Forced Outage, although clauses 7A.2.9(e) and 7A.2.9(f) allow it to do so under some circumstances. System Management suggests that Synergy should be required to update its Balancing Submissions, including after its gate closure, as soon as it becomes aware of any outage, as are all other Market Participants under clause 7A.2.10.	See section 6.3.2.4 of this report.
		on Opportunistic Maintenance Outages spanning two Tradin s on the timeframes for making consecutive Opportunistic N	
10	ERM Power	ERM Power notes that often unforeseen plant issues arise for which a clear root cause and effect cannot be entirely established at the time. ERM Power considers that from an operations perspective these become asset risk management issues to which the current and proposed restrictions on Opportunistic Maintenance are an unnecessary input.	See section 6.3.3.1 of this report.



Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
11	ERM Power	ERM Power considers that a Market Participant should be able to request a longer Opportunistic Maintenance outage that leads directly into a 'pre-accepted' Scheduled Outage without any gap; and that System Management should approve all such requests if there is sufficient reserve margin.	See section 6.3.3.1 of this report.
12	ERM Power	ERM Power understands the IMO's concerns regarding participants providing advance notice of outages to the market and avoiding Forced Outage status. However, this is a concern that should be considered as secondary to the intent of finding opportune times to do maintenance works. It should be possible to establish a set of criteria for detecting and incentives for discouraging behaviour of participants blatantly abusing Opportunistic Maintenance either as a means of avoiding Forced Outage status or for ongoing reactive as opposed to proactive well-planned preventative maintenance.	See section 6.3.3.1 of this report. The Rule Change Panel does not agree that the objective of greater flexibility for Market Generators should take precedence over transparency and reliability considerations, and considers the proposed arrangements provide a reasonable balance between these competing objectives.
13	ERM Power	The proposed limit of 24 hours outage duration contributes to shorter-term multiple fixes which increase the total plant downtime (steam cycle cooling) and does not promote reliable production.	See section 6.3.3.1 of this report. The Rule Change Panel also notes that Opportunistic Maintenance is not intended for extensive repairs of large thermal generators, and that such repairs should be conducted under a Scheduled Outage (assuming the outage meets the availability requirement).
14	Synergy	Synergy provides an overview of its asset management philosophy and maintenance practices, which involve a combination of proactive maintenance and planned optimisation of reactive maintenance. Synergy considers	See section 6.3.3.1 of this report.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		that addressing emergent plant issues as soon as possible leads to the most economically efficient and reliable outcomes for the market. This non-mandatory preventative and/or corrective maintenance reduces the likelihood of Forced Outages (and therefore unreliability) in the future. Further, Synergy notes that a Facility tripping in service or unplanned events are the most costly events for the market, whereas Planned Outages, when taken at the appropriate time when there is sufficient capacity, are almost benign.	
15	Synergy	Synergy considers that the outage planning process should be as simple and flexible as possible. As such, Synergy considers that, at its most basic, the elements for approving any outage should be: System Management should assess each application in the order that it is received; System Management should have the appropriate time to fully assess the potential implications if the outage were approved; and System Management should be reasonably satisfied	See section 6.3.3.1 of this report.
		that there would continue to be sufficient reserve margin if the outage(s) were approved. For Planned Outages, these simple principles for outage approval are reasonably well-defined in both the Market Rules and the PSOP: Facility Outages. However, Synergy considers that the Opportunistic Maintenance processes could be simplified and incorporated, where necessary, into the above framework.	

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
16	Synergy	 In making its suggestions regarding Opportunistic Maintenance, Synergy notes that: the Market Rules currently provide adequate incentive for outages being sought early. Synergy notes that clause 3.18.5A ensures that System Management prioritises Outage Plans that were received more than a year in advance over those received two days in advance; the Market Rules, as proposed to be amended by RC_2013_09: Incentives to Improve Availability of Scheduled Generators, will provide more than adequate incentives for Market Participants to apply for too many Planned Outages; and there are other off-market incentives for Market Generators to return to service following a Planned Outage as soon as practicable, for example for those bilaterally contracted having to source replacement generation at potentially higher prices. 	 the Option provided under clause 3.18.5A may provide an incentive to request major routine outages (e.g. A-class and B-class outages for thermal plant) a year in advance, but is unlikely to have a material impact on decisions as to when to request a Planned Outage to investigate an emerging plant issue; and the reforms first proposed in RC_2013_09 (and since implemented by the Minister) and the other off-market incentives noted by Synergy encourage Market Generators to limit the total duration of their Planned Outages, but not to provide advance notice of their Planned Outages to the market.
17	Synergy	Synergy notes that, during consultation on the IMO's five-year Outage Planning Review, a common theme that emerged was that there should be no time constraints with respect to apply for Opportunistic Maintenance, and that the only consideration should be system security and availability. In response to this PA Consulting noted that: "While there may be room for added flexibility, there is a risk that removing all time constraints on Opportunistic Maintenance may undermine the scheduled"	See section 6.3.3.1 of this report.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		maintenance process and the incentive to apply for an outage at the earliest possible time. For now, we note that this is an area that the IMO and System Management may explore further in the future." Synergy considers that the time is right to consider this proposal.	
18	Synergy	Synergy reiterates the suggestion made by several Market Generators, including Synergy, to the IMO during the first submission period that the concepts of 'on-the-day' and 'day-ahead' Opportunistic Maintenance be replaced with one 'opportunistic/maintenance' outage which, if sufficient margin exists, could take effect immediately (or with an appropriate lead time to signal an outage to the market) until the point a pre-accepted Planned Outage could (if approved) commence. Synergy considers this would lead to both economically efficient and reliable outcomes for the market.	See section 6.3.3.1 of this report.
19	Bluewaters	Bluewaters asks the IMO to consider the following analogy: A taxi has five tyres – four on the car, one in the boot (a healthy spare). One of the tyres, after some previous use and tyre rotations, or even some unforeseen incidental damage, is wearing and it is not clear precisely when it will become unsafe or illegal (or potentially even blow). Experience, and perhaps some measurement, reveals it is likely to need to be changed out some time in the next 1-15 weeks. It will not make it	The Rule Change Panel agrees with Bluewaters that identifying an issue in advance that needs attention, and identifying the time frame it should be addressed in, should not by default define that task as a Forced Outage. However, the Rule Change Panel considers that: • if the maintenance was delayed to the point that the driver is now aware that the tyre will blow if not replaced by Saturday morning, then the

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		to annual service in 30 weeks' time. This weekend the driver has minimal booking commitments. Is it a Forced Outage to service the car this weekend since it is convenient and likely to be less costly than any other weekend in the future when you are forecast to have more driving commitments?	 maintenance should be regarded as a Forced Outage (as it is no longer discretionary); and if the weekend plans of other taxi drivers and passengers could be affected by the timing of the maintenance (e.g. if the pool of taxis is small, other drivers may decide to delay their own maintenance plans to take advantage of the increase in
		 Is it a Forced Outage to take it out of service in 3 weeks' time, 27 weeks before its scheduled annual outage? 	available business) then it is reasonable to require the taxi driver to provide sufficient notice of the event to permit others to respond.
		 Is it a Forced Outage simply because you took that car out of service for maintenance ahead of its annual major outage? 	
		 Is it a Forced Outage if the tyre blows before you elected to take the car out of service to replace the worn tyre? 	
		Bluewaters contends it is a Forced Outage if the tyre blows but in all other cases it is a Planned Outage (and can be approved if the technical criteria are met). If the demand for taxis isn't high, if the taxi company approves the outage and if a mechanic is available it makes sense to service the taxi now.	
		Identifying an issue in advance that needs attention, and identifying the time frame it should be addressed in, does not by default define that task as a Forced Outage. Bluewaters contends that System Management has the technical criteria set in a manner that determines if a plant	

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		market forces then determine the optimal economic time to take an outage.	
20	Bluewaters	Bluewaters perception of the IMO's sentiment is that there is a prioritising of the deterrence of participants potentially 'hiding' Forced Outages, ahead of incentivising the best economic outcomes of outage planning and maintenance activities. Conversely, it appears to Bluewaters that generation representatives are prioritising achieving the best economic outcomes ahead of the consideration that a participant may attempt to hide a Forced Outage. Bluewaters believes the over-arching umbrella of the Availability Incentives rule change (RC_2013_09) combined with the obvious signs a facility is experiencing a Forced Outage and the technical criteria required to be met to have an outage approved, provide adequate protection to the market from participants hiding a material level of Forced Outage under the guise of a Planned Outage.	 The Rule Change Panel notes that: the proposed outage planning arrangements are intended not only to deter the hiding of Forced Outages but also to provide more timely and accurate information to the market about upcoming outages; and the RC_2013_09 reforms place a limit on the total duration of a Balancing Facility's Planned Outages, but do not encourage Market Generators to provide advance notice of their Planned Outages to the market.
21	Bluewaters	Bluewaters considers that the current rules effectively deliver participants and the IMO with two 'downsides' - easily hidden short-term Forced Outages, and no real flexibility for genuine Opportunistic Maintenance outages as a result of the 'gap' requirement. Bluewaters proposes: The removal of on-the-day and day-ahead outages, to be replaced with one outage - an 'Opportunistic Outage'. This is a non-forced outage that can take effect	See section 6.3.3.1 of this report.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		 from 'immediately' until the point a pre-accepted Planned Outage could (if approved) commence. The IMO could consider a 6-hour 'gate closure' from application time (anytime between 6am and 6pm) until approved derating, as the IMO is clear that it does not want participants to be easily able to disguise what is a Forced Outage with an approved Planned Outage. This would give the market 6 hours' notice of the outage if, as per the Rule Change Proposal, the capacity must be declared unavailable in Balancing Submissions. A Dispatch Advisory could also be sent advising participants that an XX MW Opportunistic Outage had been granted to facility_name. 	
		 The Availability Incentives rule change (RC_2013_09) could incorporate a threshold on the number of "Opportunistic Outage" equivalent days a participant may take (e.g. 8 per annum, or 20 per 1000 days). 	
		Bluewaters considers that this type of outage would provide a longer lead time before derating (an improvement on the current and proposed rule regime), while capturing the benefits of being able to have longer outages at an opportunistic point in time (be it a time that is economically better to the participant and/or one suitable to System Management).	
Issue	13: Availability	declarations for Planned Outage approval requests	
22	Collgar	Collgar is in support of the IMO's proposed solution for Issue 13. Collgar does believe that there needs to be a bit	The Rule Change Panel considers that verbally notifying System Management of the need for an

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		more flexibility around extension of existing Planned Outages. There can be instances where planned maintenance works encounter problems and genuinely need an extension. The solution would be to verbally notify System Management to enable extension of the existing approved Planned Outage.	extension would not provide other Rule Participants with any notice about the extension and would not provide an acceptable audit trail for compliance monitoring purposes.
Additi	onal Issues		
23	Bluewaters	Clause 3.19.2(b)(i) should either be deleted or read: "the outage must be to allow minor maintenance to be performed;" as Bluewaters supports the notion that a more effective outage process would allow the commencement of a 'larger' piece of work if it is opportunistically the best time to get the outage underway. That said, Bluewaters questions the practicality of enforcing such a rule on these terms (i.e. what is 'minor maintenance'?).	See section 6.4.2.1 of this report.
24	Bluewaters	Bluewaters considers that, without taking anything away from the process of assessing outages, clause 3.19.3A(d) (which allows System Management to decline to approve Opportunistic Maintenance where it considers that inadequate time is available before the start of the outage to adequately assess the impact of the outage) remains a little vague in its accountability for declining to approve an outage. Bluewaters suggests that perhaps the clause could be improved to allow System Management the flexibility to take the additional time it needs. In turn, it could add the extra	The Rule Change Panel considers it may not be efficient for System Management to assess an Opportunistic Maintenance request for a different outage period to that requested, on the off-chance that the Rule Participant would want to take an outage in that period. Further, throughout the consultation process for this Rule Change Proposal stakeholders have consistently expressed the need for timely decisions on their outage requests, and so are likely to still require a timely

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		time it took to deliberate to the start and end time of the outage request (which is then offered to the participant who has some right of taking up the offered outage or declining).	decision on their original requests regardless of what subsequent actions are taken. Finally, the Rule Change Panel notes that clause 3.19.7 already requires that, where System Management rejects an outage, System Management and the Rule Participant must use their best endeavours to find an alternative time for the relevant outage.
25	System Management	One of the intentions of this Rule Change Proposal is to enhance transparency around outage planning. System Management assumes this includes transparency around Network outages but notes clause 7.13.1D (which requires the capture of Planned Outage information for near-real time publication on the Market Web Site) only covers outages of Scheduled Generators and Non-Scheduled Generators. System Management suggests that clause 7.13.1D be amended to apply to all Planned Outages, including Network outages.	The Rule Change Panel notes that changes to publish Network outage information on the Market Web Site are not within the scope of this Rule Change Proposal. However, the Rule Change Panel understands that the scope of the WEM Reform Program includes the publication of Network outage information to support the implementation of security constrained economic dispatch in the WEM.
26	System Management	System Management notes that proposed clause 3.18.2(b) requires System Management to review and update the Equipment List from "time to time". System Management suggests this be reworded to: "System Management must, as soon as practicable, review and update the Equipment List whenever Facilities or items need to be added, updated or removed from the list. If System Management updates the Equipment list is must provide the IMO with a copy of the updated list in accordance with the Market Procedure."	The Rule Change Panel agrees that the obligation to keep the Equipment List up to date should be clearer and has proposed additional changes to clause 3.18.2(b) to reflect the intent of System Management's suggestion, as noted in section 6.4.4 of this report.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
27	Bluewaters	The IMO is currently developing a rule change or clarification that should more clearly define a 'Forced Outage'. Despite not wishing to see undue delay in rule changes, Bluewaters believes the definition of a Forced Outage is central to the concepts of this Rule Change Proposal. As the definition of a Forced or Planned Outage will undoubtedly influence the construct of the outage planning process (and the types of outages therein), either that definition (PRC_2013_16) should precede this Rule Change Proposal, or an agreed definition adopted in this Rule Change Proposal should flow into PRC_2013_16. Bluewaters requests that the IMO clarify which is precedent for the purposes of these Rule Change Proposals.	See section 6.4.3 of this report. The Rule Change Panel notes that while the IMO did not submit PRC_2013_16 into the formal rule change process, it incorporated several of the issues addressed in PRC_2013_16 into RC_2014_03, which is currently being processed by the Rule Change Panel.
28	Synergy	Synergy notes that, as part of the Pre-Rule Change Proposal PRC_2013_16: Outages and the Application of Availability and Constraint Payments to Non-Scheduled Generators, the IMO is undertaking a significant review of the definition of an outage. Synergy is concerned that the IMO is reforming the outage planning process without the definitions of an outage being sufficiently progressed. Synergy considers that any amendments to the definition of an outage should be progressed as part of this proposal.	See the response to issue 27 above.
29	Collgar Wind Farm	Collgar notes that it has highlighted to AEMO on numerous occasions that it believes the current outage planning, management and lodgement process is too complicated. Collgar provides an example where it considers the proposed changes to Opportunistic Maintenance timeframes would have been beneficial.	Noted.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
30	Collgar	Collgar offers several proposals in relation to clause 3.21.7 of the Market Rules, which states: "Notwithstanding the requirements of clause 3.21.4 that a relevant Market Participant or Network Operator must inform System Management of a Forced Outage or Consequential Outage as soon as practicable, a Market Participant or Network Operator must provide full and final details of the relevant Planned Outage, Forced Outage or Consequential Outage to System Management no later than fifteen calendar days following the Trading Day." The proposals include clarification of the meaning of 'as soon as practicable', resolution of a potential ambiguity in the definition of Consequential Outage, and the ability to update Forced Outage details after the current 15-day deadline.	The Rule Change Panel notes that Collgar's proposals relate to issues that fall outside the scope of this Rule Change Proposal. However, the Rule Change Panel is also progressing RC_2014_03, which focusses on Forced and Consequential Outages, and includes changes to clause 3.21.7. The Rule Change Panel will consider the issues raised by Collgar during its assessment of RC_2014_03.

Appendix C. Summary of Feedback on the Questions in the Call for Further Submissions

No	Question	Feedback		
4.1.1: C	4.1.1: Obligations for Small Scheduled Generators with Capacity Credits			
1	Whether proposed clause 3.18.2(c)(ii) should be further amended to require the inclusion of all Scheduled Generators holding Capacity Credits on the Equipment List, not just those with a nameplate capacity of at least 10 MW.	Alinta and Bluewaters: agreed. AEMO: had no objection, while noting its powers to add Facilities to the Equipment List under clause 3.18.2(c)(v).		
4.1.2: N	Materiality Threshold for Non-Scheduled Generator Outage	s		
2	Whether the obligations on Non-Scheduled Generator Outage Facilities to request or report Outages should be further clarified through the specification of a materiality threshold.	AEMO, Alinta and Bluewaters: agreed. Perth Energy: supported the introduction of a materiality threshold, but considered a materiality threshold should also apply to Scheduled Generators.		
3	If so, whether a materiality threshold of minimum(0.2 * Facility's nameplate capacity, 6) MW should be adopted, or whether another threshold is preferable.	AEMO: considered the proposed formula to be a reasonable starting position; however, suggested that the Market Rules require the threshold to be determined in a Market Procedure, as this would allow changes to be introduced should this formula become difficult or impractical to cover all circumstances or types of technologies. Alinta: proposed a flat percentage of at least 10% of nameplate capacity, to allow for increasing wind turbine sizes. Bluewaters: no specific comment or suggestion.		
4.2.1: U	4.2.1: Unavailable Quantity Requirement for Non-Scheduled Generator Balancing Submissions			
4	Whether there is any need for the proposed requirement to include declared MW quantities of unavailable capacity in Balancing Submissions for Non-Scheduled Generators.	AEMO, Alinta and Bluewaters: considered that there is no need to require an unavailable capacity declaration.		



No	Question	Feedback
4.2.2: 1	reatment of Scheduled Generator Capacity without Capac	ity Credits
5	Whether a Market Generator should be obliged to request or report an outage if it is not undertaking maintenance on its Scheduled Generator but does not wish to offer some or all of the Facility's capacity that is not associated with Capacity Credits into the Balancing Market.	AEMO, Alinta and Perth Energy: considered Market Generators should not be required to request or report an outage in these circumstances. Bluewaters: Possibly, if the relevant capacity is to be included in the reserve margin.
6	Whether AEMO should take generator capacity that is not subject to Capacity Credits into account when determining reserve margins for Medium Term and Short Term PASA studies and evaluating Planned Outage requests.	AEMO: preferred that the Market Rules do not specify whether the reserve margins take this capacity into account. Alinta and Bluewaters: considered the capacity should be taken into account (for Bluewaters, possibly with some adjustment to reflect likely availability). Perth Energy: suggested that the decision should be considered more holistically as part of the ERA's next review of the Planning Criterion under clause 4.5.15 of the Market Rules.
4.2.3: F	Re-entry to Balancing Market after Planned Outage Recall o	or Late Rejection
7	Whether AEMO should be allowed, in the event of a late rejection or recall of an approved Planned Outage, to direct the Market Generator to return the relevant capacity to the Balancing Market as soon as practicable, even if this is after Balancing Gate Closure (noting that the Market Generator would not be required to provide any subsequent notification to AEMO to explain the late Balancing Submission).	AEMO: prefer the onus to be on the Market Generator and suggested that an alternative may be for the outage recall rules to provide a requirement or permission for a Market Generator to update its bids as soon as possible to reflect the actual availability of the Facility. Alinta and Bluewaters: agreed (with some refinements suggested). Perth Energy: opposed the change, on the basis that it would impose material costs that are not justified by the benefits.



ommissioning Tests and Outages	
Details of any stakeholder concerns about the inclusion of a clarification in the proposed Amending Rules for this Rule Change Proposal that a Market Generator may operate its Facility in accordance with an approved Commissioning Test while under a Planned Outage.	AEMO, Alinta, Bluewaters and Perth Energy: supported the proposed clarification.
larification of Requirements for Opportunistic Maintenance	e Requests
Whether clause 3.19.2(b)(ii) (the requirement for an Opportunistic Maintenance request that "the outage must not require any changes in scheduled energy or Ancillary Services") should be deleted or otherwise amended.	Alinta and Bluewaters: considered the clause should be deleted. AEMO: supported further clarification of the clause, and suggested this could include specifying considerations in a Market Procedure.
eadline for Approval or Rejection of a Scheduled Outage	
What deadline should apply to the approval of Scheduled Outages.	AEMO: indicated a deadline 2:00 PM on TD-2. Alinta: indicated a deadline of 2:00 PM on TD-2, noting that AEMO should still endeavour to approve as early as possible. Bluewaters: preferred that the approval requirement be tied to a time period after the application date. Perth Energy: considered AEMO should be required to approve/reject Scheduled Outages by the earlier of: 15 Business Days after the request is submitted; and 2:00 PM on TD-2.
()	clarification in the proposed Amending Rules for this Rule Change Proposal that a Market Generator may operate its Facility in accordance with an approved Commissioning Test while under a Planned Outage. Arification of Requirements for Opportunistic Maintenance Whether clause 3.19.2(b)(ii) (the requirement for an Opportunistic Maintenance request that "the outage must not require any changes in scheduled energy or Ancillary Services") should be deleted or otherwise amended. Adline for Approval or Rejection of a Scheduled Outage What deadline should apply to the approval of Scheduled



No	Question	Feedback	
4.3.3: Clarification of Obligation under Clause 3.19.4			
11	What, if any, additional prescription or guidance should be included in the Market Rules around the practical application of clause 3.19.4 (the obligation for AEMO to approve or reject outage requests as soon as practicable).	AEMO: preferred that the relevant Market Procedure prescribes the practical application of clause 3.19.4, but was comfortable for the Market Rules to provide guiding principles. Alinta: considered that there is no need for additional prescription or guidance in the Market Rules. Bluewaters: preferred an explicit time limit to approve requests.	
4.4.3: I	mplications of Outage Plan Changes		
12	 What other changes to an Outage Plan or Opportunistic Maintenance request in addition to: starting the outage earlier or ending it later; and a material increase in the quantity of de-rating should result in the revised outage request being treated as a new request for the purposes of assessment and prioritisation, including for the application of availability declaration requirements, if any. 	AEMO: provided no further suggestions. Alinta: considered that a change should only be treated as a new request if it had an impact on AEMO's ability to maintain system adequacy; or alternatively that 'minor' changes should be allowed to outage periods. Bluewaters: provided no further suggestions, but considered that a quantitative measure of "material" is needed.	
4.4.4: N	Nature of the Availability Declaration Requirement		
13	Whether the changes to the proposed availability requirements for Planned Outages discussed in section 4.4.4 of the CFFS would lead to more efficient outcomes than the requirements proposed in the Rule Change Proposal.	AEMO: considered that the amendments will not materially change the effectiveness of the clause while simplifying the process for Market Participants. Alinta and Bluewaters: agreed.	
14	If the changes to the proposed availability requirements for Planned Outages discussed in section 4.4.4 of the CFFS	AEMO: preferred not to be obliged to reject an outage request in this situation, as "in most circumstances AEMO does not have the	



No	Question	Feedback
	were to be implemented, whether AEMO should be obliged (rather than just allowed) to reject an outage request if it is aware that the relevant capacity would not otherwise be available for the full duration of the outage period.	means to accurately assess (without assistance from the Market Participant) whether a generator is available". Alinta: noted that it wished to see drafting before commenting. Bluewaters: considered AEMO should be obligated to reject an outage request in these circumstances.
4.4.5: A	Availability Declaration Timelines	
15	Whether the point after which a Scheduled Outage no longer needs to be withdrawn or rejected because it ceases to meet the applicable availability requirement should be the point of first acceptance into AEMO's outage schedule or the point at which the Scheduled Outage is approved.	AEMO and Alinta: indicated that it should be the point of first acceptance into AEMO's outage schedule. Bluewaters: indicated that if time period limits for approval were implemented then it should be the point at which the Scheduled Outage is approved; if not, then it should be the point of first acceptance into AEMO's outage schedule.
4.4.6: A	Ability to Start Work on a Scheduled Outage Early	
16	Whether the Rule Change Panel should extend the proposed exemption from the availability requirements currently set out in proposed clause 3.19.2D(a) to apply to Planned Outages that immediately follow any Planned Outage of the relevant capacity, not just a Scheduled Outage.	AEMO, Alinta and Bluewaters: agreed.
4.4.7: F	Prevention of Disingenuous Planned Outage Requests	
17	Whether the additional changes discussed in section 4.4.7 of the CFFS provide an appropriate and sufficient safeguard against disingenuous Planned Outage requests where it is	AEMO: expected the incentives in the Market Rules and the additional changes proposed will provide sufficient safeguards. Alinta: was supportive of the intent but was waiting on drafting. Bluewaters: considered the proposed safeguards are sufficient.



No	Question	Feedback
	likely that the relevant capacity will be unavailable for dispatch if the request is rejected	
18	What principles or guidelines, if any, should be included in the Market Rules to guide AEMO's assessment of evidence that capacity would be able to be made available for dispatch prior to the start of a requested Planned Outage.	AEMO: preferred that a Market Procedure details the information and was comfortable for the Market Rules to provide guiding principles. Alinta: supported the intent but was waiting on drafting. Bluewaters: considered that ensuring the subjectivity applied to the satisfaction of evidence is appropriately transparent will be crucial to the application of the safeguards.
4.4.8:	Application of Availability Declaration Requirements to non	-Generator Equipment List Facilities
19	The extent to which the proposed availability declaration requirements for Scheduled Generators and Non-Scheduled Generators discussed in this section 4.4 should also apply to Planned Outages of other Equipment List Facilities, including items of Network equipment and Registered Facilities subject to an Ancillary Services Contract	AEMO: saw no reason not to extend the requirements to all Equipment List Facilities. Bluewaters: supported extending the requirements to all Equipment List Facilities.

Appendix D. Responses to Submissions Received in the Further Submission Period

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response		
4.1.2 N	4.1.2 Materiality Threshold for Non-Scheduled Generator Outages (Questions 2-3)				
1	Alinta	Alinta notes that when the proposed materiality threshold was first discussed in the EMOP Consultation Group the largest individual Wind Turbine Generator (WTG) on the system was likely no larger than 2 MW, and in that respect the proposed materiality threshold seemed appropriate. Individual WTGs are increasing in size and are now between 4 to 6 MW each, depending on the technology chosen. Alinta considers that the materiality threshold needs to be addressed within the context of increasing WTG size and that the workload of both Market Participants and AEMO vs the market being aware of such outages needs to be balanced. Alinta suggests that the materiality threshold would be more appropriately set as a percentage of a Facility's Nameplate Capacity only and not an absolute MW value.	See section 6.4.1.3 of this report.		
		Alinta considers that the threshold should be at least 10% of a facility's nameplate capacity (i.e. for a 100 MW wind farm comprised of twenty 5 MW WTGs, this would represent 2 WTGs).			
2	AEMO	AEMO considers the proposed formula for setting the materiality threshold to be a reasonable starting position. However, AEMO suggests that the Market Rules require the threshold to be determined in a Market Procedure, which would allow for changes to be introduced should this formula	See section 6.4.1.3 of this report.		



Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		become difficult or impractical to cover all circumstances or types of technologies.	
4.2.2 7	reatment of S	cheduled Generator Capacity without Capacity Credits (Que	estions 5-6)
3	Bluewaters	Bluewaters considers that generally, all available resources that contribute to the generation capability in the market should be considered in the PASA studies and evaluating Planned Outage requests. This includes Facilities allocated Capacity Credits as well as those without Capacity Credits. There are several reasons why a facility may not be allocated Capacity Credits but still continually be available for dispatch. In such a situation, where a facility is seen to reliably provide energy to the market, its generation capability should be considered in the reserve margins. Acknowledging that at times it may not be clear to AEMO how reliable this non-Capacity Credit generation capability may be, Bluewaters considers that perhaps a threshold of observable operation (e.g. the percentage of intervals made available) can be considered to determine the inclusion in the reserve margins. Bluewaters notes that if this approach is taken it is more important to have outage reporting requirements for this non-Capacity Credit generation so that the reserve margin calculations are more reliable.	The Rule Change Panel agrees there may be reasons why a facility that is not allocated Capacity Credits may still regularly offer its capacity into the Balancing Market. However, for AEMO to include any such capacity in the reserve margin, it would need to be confident that the Market Generator will choose to offer that capacity, since it has no obligation to do so under normal circumstances. Regardless of how PASA studies treat this capacity (a question that falls outside the scope of this Rule Change Proposal), the Rule Change Panel considers it unreasonable to impose additional outage reporting obligations on Market Generators to facilitate the inclusion of capacity in the reserve margin for which they are not being paid.
4	Perth Energy	Perth Energy suggests that the decision to include or exclude capacity not subject to Capacity Credits should be considered more holistically as part of the ERA's review of the Planning	RCP Support sought clarification of Perth Energy's comments in a meeting held on 23 January 2019. Perth Energy advised that its main concern was not so much about long term planning (e.g. the Planning



Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		Criterion in accordance with clause 4.5.15 of the Market Rules. Perth Energy highlights that, prior to the transition of the requirement to perform this review from the IMO to the ERA, it was scheduled to be undertaken in 2017. Perth Energy recommends that the ERA be required to undertake this review as a matter of priority.	Criterion and the determination of the Reserve Capacity Target) but rather how AEMO estimates the reserve capacity that will be provided by Intermittent Generators for use in outage assessments. Perth Energy considered that the capacity of Intermittent Generators that is not subject to Capacity Credits should still be considered by AEMO as the generators would still be expected to make this capacity available. However, Perth Energy did not consider the capacity of Scheduled Generators that is not subject to Capacity Credits should be assumed by AEMO to be available. The Rule Change Panel notes that these matters fall outside the scope of this Rule Change Proposal.
5	AEMO	AEMO considers that further investigation is required to understand AEMO's ability to dispatch capacity in excess of that bid into the Balancing Market. This is because clause 3.2.5(a) would be would appear to override the Standing Data maximum capacity with the quantity available in the Balancing Merit Order. (Note: clause 3.2.5(a) requires System Management, in establishing and modifying the Technical Envelope, to respect all Equipment Limits but only to the extent those limits are not inconsistent with the dispatch of Facilities that, but for the Equipment Limits, would be dispatched under clause 7.6.1C).	During a follow-up meeting held on 24 January 2019, AEMO advised that it had investigated its concern and no longer considered it to be an issue.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
6	AEMO	AEMO prefers that the Market Rules do not specify whether the reserve margins should take generator capacity that is not subject to Capacity Credits into account when determining reserve margins for Medium Term and Short Term PASA studies and evaluating Planned Outage requests, noting that the Balancing Market is not specifically tied to this capacity.	The Rule Change Panel considers that this issue falls outside the scope of this Rule Change Proposal.
4.2.3 F	Re-entry to Bal	ancing Market after Planned Outage Recall or Late Rejection	on (Question 7)
7	Bluewaters	Bluewaters suggests clear governance should be applied, e.g. issuing a Dispatch Advisory advising participants that AEMO has instructed Market Participant X to revise its submission within Balancing Gate Closure due to Outage rejection. Bluewaters considers that this will allow other Market Participants to assess their expectation of dispatch amount with a similar effect to the rules requiring a Dispatch Advisory for Out of Merit generation.	See section 6.3.2.6 of this report.
8	Perth Energy	Perth Energy considers that to avoid unnecessary non-compliances, Market Participants are likely to have designed systems and processes to avoid the ability to increase a Facility's capacity after Balancing Gate Closure. The proposed changes would therefore be likely to require Market Participants to amend their trading systems and processes to allow these changes to be made. Perth Energy notes that under the current Market Rules, System Management is able to intervene in the market without any constraints to avoid system security issues, or maintain existing levels of system security.	See section 6.3.2.6 of this report.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		Perth Energy considers that while the proposal to allow capacity to be returned to service as soon as practicable and even after gate closure, appears reasonable, given that the recall or late rejection of an outage is very rare, the cost of system changes for both AEMO and Market Participants could exceed the benefit to the market.	
9	Alinta	Alinta is concerned that there could be a compliance risk to participants by exempting some late Balancing Submissions from the reporting process. Alinta would prefer to provide a notice for all late Balancing Submissions. Alinta considers that, given late rejections or recalls of approved Planned Outages are a rare occurrence, the obligation to provide a notice should not represent significant additional impost on Market Participants.	See section 6.3.2.6 of this report.
10	AEMO	AEMO notes that its preference is not to direct Market Participants to update their Balancing Submissions following the recall or rejection of an outage. AEMO considers that this obligation (should it proceed) should be the onus of the Market Participant. AEMO notes, however, that an alternative may be for the outage recall rules to provide either a requirement or permission for a participant to update their bids as soon as possible, reflecting actual availability of the Facility.	See section 6.3.2.6 of this report.
4.2.4 C	Commissionin	g Tests and Outages (Question 8)	
11	Perth Energy	Perth Energy recommends the Commissioning Test process is considered more holistically with a view to make necessary	The Rule Change Panel agrees that the Commissioning Test processes would benefit from a

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		changes to allow Market Participants to fully comply with the rule requirements.	comprehensive review and notes that the MAC Market Rules Issues List includes Commissioning Tests as a broader issue for review. However, the Rule Change Panel considers that such a review falls outside the scope of this Rule Change Proposal.
12	Alinta	Alinta does not have any concerns about the inclusion of a clarification noting that a Market Generator may operate its Facility in accordance with an approved Commissioning Test while under a Planned Outage but Alinta considers that this should remain a "may" obligation i.e. it is not a "must" obligation to undertake commissioning under a Planned Outage.	The Rule Change Panel notes that it does not intend to include an obligation on Market Generators to undertake commissioning tests under an Outage as part of this Rule Change Proposal.
4.3.1	Clarification of	Requirements for Opportunistic Maintenance Requests (Q	uestion 9)
13	AEMO	AEMO supports further clarification of clause 3.19.2(b)(ii), which could include specifying considerations in a Market Procedure.	See section 6.4.2.1 of this report.
4.3.2	Deadline for A	pproval or Rejection of a Scheduled Outage (Question 10)	
14	Bluewaters	Bluewaters firmly believes that due to the complexity of planning an outage with resourcing and energy requirements, the earliest approval time possible should be applied. Executing Planned Outages are the most significant burdens for Bluewaters to manage as a Market Generator. Bluewaters considers that to have this significant undertaking subject to approvals of TD-2 or later is entirely impractical, though smaller outages that are more opportune may be less	See section 6.3.2.2 of this report.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		affected by later approvals in which case the TD-2 approval may be sufficient. Bluewaters notes that, in practice, it requests Planned Outages at the same time that it is undertaking detailed planning for the outage, which is the point where it is looking for certainty to lock in resources, contractors, parts and replacement energy. As time passes and these aspects require locking in, the ability to move an outage becomes increasingly difficult. Bluewaters considers that an approval requirement that is tied to a time period after the application date rather than the Trading Day would be a more appropriate mechanism to provide the required certainty for a generator and reflects the associated significance of the outage approval based on the lead-time of the approval being sought.	
15	Perth Energy	Perth Energy considers that the proposed two-day timeframe for approval of outages is insufficient. It notes that the Outage planning process allows Market Participants to request an Outage up to three years in advance. This large window is provided in recognition that Outages covering major maintenance and plant overhauls require significant advanced planning and commitment. For example, these activities often require international technical expertise, which in turn requires more than two days' notice of confirmation. Perth Energy considers that System Management should approve a requested Outage as soon as practicable. This should provide Market Generators with a greater incentive to	See section 6.3.2.2 of this report.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		submit Outage requests earlier, and in turn, provide System Management more visibility of system adequacy in advance. On this basis, Perth Energy considers System Management should be required to approve or reject a requested Outage no later than 15 Business Days after the request is made. Additionally, where the request is made fewer than 15 Business Days before the Outage is scheduled to commence, System Management must advise as soon as practicable, but no later than two days prior to the day on which the Outage is to commence.	
16	Alinta	Alinta notes that in recent times AEMO has been providing approval with conditions. This is a concept that is not addressed in the Market Rules at present. Alinta recommends that the rules require the Facility Outages PSOP address the concept of conditional approval.	RCP Support sought clarification from AEMO around the concept of approval with conditions during a meeting held on 24 January 2019. AEMO advised that 'approved with conditions' was a misnomer and the Planned Outages in question were actually approved. In these cases, AEMO provided information to the Rule Participant about the circumstances under which the approved Planned Outage might be subject to a late rejection; however, the outages in question met the criteria for approval under clause 3.19.6.
4.3.3 (Clarification o	f Obligation under Clause 3.19.4 (Question 11)	
17	AEMO	AEMO is comfortable for the Market Rules to provide guiding principles if required but prefers that the relevant Market Procedure prescribes the practical application of clause 3.19.4.	See section 6.3.2.2 of this report.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response		
4.4.3 I	.4.3 Implications of Outage Plan Changes (Question 12)				
18	Bluewaters	Bluewaters notes that a quantitative measure of "material increase" will help to remove uncertainty surrounding changes to Outage Plans or Opportunistic Maintenance.	See section 6.3.4.3 of this report.		
19	Alinta	Alinta considers that outage plan changes should be considered as new outage requests where they would impact on AEMO's ability to maintain system adequacy rather than boundary changes. Alternatively, the rules should reflect that minor changes in previous boundaries may need to be allowed to avoid perverse consequences, for example where a major Scheduled Outage of a Generator loses its priority in the outage schedule because of a small change to the outage start or end date after the acceptance of the Outage Plan.	See section 6.3.4.3 of this report.		
4.4.4 N	Nature of the A	Availability Declaration Requirement (Questions 13-14)			
20	Alinta	While Alinta supports the intent of the Rule Change Panel's proposed approach to restrict a Market Generator from requesting a Planned Outage if it is aware that the facility would not be available for the full duration of the outage period, Alinta would like to assess this more fully once the proposed Amending Rules are available. As such, Alinta reserves its right to make further comment on this issue in a future submission.	Noted.		
21	AEMO	AEMO prefers not to be obliged to reject an outage request if it is aware that the relevant capacity would not otherwise be available for the full duration of the outage period. In most	See section 6.3.4.4 of this report.		

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		circumstances, AEMO considers that it does not have the means to accurately assess, without assistance from the Market Participant, whether a generator is available. In such a situation, AEMO would request further information from the Market Participant to indicate whether the Facility would be otherwise available. AEMO provides a time limit for the response and will reject the outage if the evidence is not provided within the time limit or the deemed rejection limit. AEMO considers this is a procedural matter that does not necessarily need to be reflected in the Market Rules.	
4.4.5	Availability De	claration Timelines (Question 15)	
22	Bluewaters	Bluewaters considers that if AEMO's obligation to approve Scheduled Outages was linked to the application date, then the availability requirement could be linked to the approval into AEMO's outage schedule. Failing this, Bluewaters supports the position outlined in the paper linking the availability requirement to the acceptance into AEMO's outage schedule.	See section 6.3.4.5 of this report.
4.4.7 I	Prevention of	Disingenuous Planned Outage Requests (Questions 17-18)	
23	Bluewaters	Bluewaters considers that ensuring that the subjectivity applied to the satisfaction of evidence is appropriately transparent will be crucial to the application of the safeguards against disingenuous Planned Outage requests.	See section 6.3.4.7 of this report.
24	Alinta	Alinta is supportive of the intent of the Rule Change Panel's proposed additional changes. However, Alinta would like to assess this more fully once the proposed Amending Rules	Noted.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		are available. As such, Alinta reserves its right to make further comment on this issue in a future submission.	
25	AEMO	AEMO would prefer that a Market Procedure details the guidelines for AEMO's assessment of evidence that capacity would be able to be made available for dispatch prior to the start of a requested Planned Outage and is comfortable for the Market Rules to provide guiding principles.	See section 6.3.4.7 of this report.
Other	Issues		
26	Perth Energy	Perth Energy considers that, consistent with Wholesale Market Objective (c), the proposed materiality threshold for Non-Scheduled Generator Outages should also be applied to Scheduled Generators, and equally applied to all Facilities subject to the outage planning process. Perth Energy notes that this would, in most instances, result in the materiality threshold for Scheduled Generators being set as 6 MW, or 3 MWh, presumably chosen to reflect the tolerance range. Perth Energy suggests that the proposed Amending Rules are clarified to explicitly refer to a Facility's tolerance range determined in accordance with clause 2.13.6D or 2.13.6E of the Market Rules as appropriate. Perth Energy considers that currently the ERA interprets the Market Rules in relation to the quantity of an Outage that should be logged for a Scheduled Generator differently to the former IMO. Perth Energy notes that the ERA has recently advised it that it must log an Outage for a Trading Interval in which the generator's output was outside of its tolerance range at any	 In a meeting with RCP Support on 23 January 2019, Perth Energy confirmed that its concerns relate mainly to: the current rules – and the interpretation of those rules by AEMO and the ERA – around the application of Tolerance Ranges and determination of compliance with Dispatch Instructions, which Perth Energy consider to be draconian; and the method used to measure Forced Outage quantities for Scheduled Generators that trip off during a Trading Interval or otherwise fail to meet their required output levels at any time during the Trading Interval. With respect to Perth Energy's first concern, the Rule Change Panel notes that: the proposed materiality threshold for Non-Scheduled Generators is not intended to be used to assess compliance with Dispatch



Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		point in time, even if it was for as little as one minute. This is despite the market being operated in 30-minute Trading Intervals. Perth Energy considers that this interpretation has significantly increased the cost of investigation and compliance activities in the WEM without any improvement in market outcomes. Perth Energy considers further clarification regarding the calculation of an Outage should be provided in the Market Rules to ensure the ERA's interpretation is consistent with the intent of the definition of an Outage. Perth Energy considers that, in simplistic terms, this is the average quantity of electricity over a Trading Interval that is not available for dispatch. It is not the quantity of electricity at any point in time or ten-minute dispatch cycle, as appears to be currently used by the ERA for the monitoring of dispatch compliance.	Instructions, as Non-Scheduled Generators are already subject to Tolerance Ranges for this purpose; and as noted in section 6.4.1.3 of this report, the materiality threshold proposed in the CFFS was based on the corresponding threshold used in the National Electricity Market at the time, not the WEM Tolerance Ranges. While the Rule Change Panel appreciates Perth Energy's concerns about the determination of compliance with Dispatch Instructions, these issues do not fall within the scope of this Rule Change Proposal. The Rule Change Panel invites Perth Energy to discuss its concerns about the relevant rules (including clauses 7.10.1 and 7.10.2 of the Market Rules) with the MAC. The Rule Change Panel also notes that Perth Energy's second concern about the measurement of Forced Outage quantities is outside the scope of this Rule Change Proposal; but is being considered by the Rule Change Panel as part of its assessment of RC_2014_03.
27	Perth Energy	Perth Energy notes that the industry is yet to be provided with any information on the Minister's proposed design of the capacity mechanism or energy market. Perth Energy is therefore concerned that the proposed changes, last estimated to cost ~\$135,000 and take 12 months to	AEMO's updated (and reduced) implementation cost and time estimates are available in section 6.8 of this report. The Rule Change Panel has discussed the progression of this Rule Change Proposal and its interactions with the WEM Reform Program with the



Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		implement, could be imprudent to progress at this point in time. Perth Energy considers that the Rule Change Panel should seek formal, written confirmation from the Public Utilities Office (and the Minister for Energy) of the expected longevity of the proposed changes in light of the electricity sector reform initiatives currently underway.	PUO and AEMO on several occasions. The Rule Change Panel does not therefore consider that there is any need to seek any further, written advice on these matters from the Minister.
28	Perth Energy	Perth Energy notes that it also understands that AEMO is in the process of moving its IT systems out of Western Power, which could delay implementation further. Perth Energy expects AEMO will make a submission in response to the CFFS and provide a formal position on the timing and cost of the proposed amendments. Perth Energy considers that the Rule Change Panel should place significant weight on AEMO's implementation plan when considering the merits of progressing the proposed changes.	See section 6.8 of this report.
29	Synergy	Synergy considers that RC_2013_15 was initially intended as part of a suite of rule changes, which was designed, among other things, to clarify the Market Rules associated with many undefined concepts used in the definitions of Outages, especially the definition of Forced Outages. Synergy is concerned that, by progressing part of the whole suite of changes in isolation, the Rule Change Panel will inadvertently cause more uncertainty regarding the interpretation of the Market Rules.	See section 6.4.3 of this report.
30	Synergy	Synergy suggests that, where possible, a principled (rather than prescriptive) drafting style be adopted to enable the	See sections 6.4.2.2, 6.4.3 and 6.4.3.2 of this report regarding Synergy's concerns about a potential



Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		WEM Rules to adapt to new situations and to aid in the interpretation of undefined terms and phrases used in the WEM Rules.	conflict between clause 3.21.1 and section 7A.2A around start-up times (the example provided in its further submission of where a principled drafting approach would be preferable). In an email sent to RCP Support on 1 March 2019,
			Synergy confirmed that there are no other non-outage limitations (apart from start-up times) of concern to Synergy with regards to this Rule Change Proposal.
31	Synergy	Synergy is concerned that clarifying only some of the obligations for 'unavailability and Outages' will have unintended effects on the legal interpretation of other obligations. Synergy is specifically concerned about the undefined phrase "unavailable for dispatch," used in proposed clauses 7A.2.4A(b), 7A.2.4B(b), 7A.2.4C(b) and 7A.2A, as they do not recognise that Outage Facilities may be unavailable due to limitations not associated with Forced or Consequential Outages, or changes in temperature. Synergy considers that Market Generators' obligations appear unclear in these circumstances. As an example, Synergy considers a Facility that is offline	See section 6.4.3.2 of this report.
		and requires a time prior to resynchronisation. Proposed clauses 7A.2.4A(b), 7A.2.4B(b) and 7A.2.4C(b) would require the Market Generator to resubmit unavailability declarations for the period of its start-up time, and 7A.2A. would require it to log Forced Outages for those unavailability declarations. Synergy considers this outcome inefficient and notes that it	
		clauses 7A.2.4A(b), 7A.2.4B(b) and 7A.2.4C(b) would require the Market Generator to resubmit unavailability declarations for the period of its start-up time, and 7A.2A. would require it to log Forced Outages for those unavailability declarations.	

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		required to generate to log Forced Outages every half an hour for the entire year.	
32	Synergy	Synergy further notes that while the temperature dependence exemption in section 7A.2A is intended to avoid the need for redundant Forced Outage notifications, the explicit reference to only temperature dependence creates uncertainty for the interpretation of the other limitations, such as start-up times.	See sections 6.4.2.2 and 6.4.3.2 of this report. The Rule Change Panel notes that it has proposed some changes to how clauses 7A.2A.1 and 7A.2A.2 account for temperature de-rating, as discussed in section 6.3.2.5 of this report.
33	Synergy	Synergy considers that there is an inconsistency between the requirements to log outages in clause 3.21.1 and the requirement to log a Forced Outage under 7A.2A. Clause 3.21.1 does not appear to require Forced Outages to be logged for a Facility operating within its design limitations because there would be no "outage or de-rating" of the Facility. However, clause 7A.2A appears to require Forced Outages to be logged where there is no "outage or de-rating", but a Facility is "unavailable for dispatch" (e.g. due to its start-up time). Synergy suggests that a principled rather than a prescriptive approach to the required drafting could avoid this inconsistency e.g., an amendment or a reference to the definition of a Forced Outage could be made in 3.21.1, rather than via adding clause 7A.2A. If the current drafting is retained, clarification is required of how the inconsistency between 3.21.1 and section 7A.2A is to be resolved.	See sections 6.4.2.2, 6.4.3 and 6.4.3.2 of this report.
34	Synergy	Synergy considers prohibiting a generator from requesting a Planned Outage when the Facility will be unavailable for dispatch for the duration of the Planned Outage, rather than	See sections 6.3.4.4 and 6.3.4.7 of this report.



Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		immediately prior to its commencement, could inhibit a Market Generator from maximising the availability of its Facilities, leading to inefficient outcomes. Synergy's concern is how this rule will apply to situations where outages are required for maintenance or tests that occur at set times or after equipment has operated for a certain number of operating hours (e.g., tests required under environmental licensing or under original equipment manufacturers requirements).	
		Synergy considers that to maximise availability, Market Generators are likely to request Planned Outages to commence just prior to when these types of maintenance are required, such that the proposed outage period includes the period when this maintenance is required to be performed. As maintenance needs to be performed on the Facility during the Planned Outage, and theoretically, the Facility would not be able to operate without this maintenance, the Facility would not be available for the "duration" of the proposed outage.	
		Synergy considers that consequently, proposed clause 3.19.2B could prevent the Market Generator from requesting a Planned Outage at the most efficient time and cause it to be brought forward such that there is no overlap between the Planned Outage period and the set time when maintenance is required. This could reduce the availability of the Facility and negatively affect the economic efficiency of the WEM.	
35	Alinta	Alinta considers that if a facility returns to service early i.e., prior to the end of the Planned Outage, then its capacity should be allowed to return to the Balancing Market as soon as available, even if gate closure has already occurred. To	While acknowledging the efficiency benefits of shorter gate closure, the Rule Change Panel notes that the reasons for restricting changes to Balancing Submissions within Balancing Gate Closure do not

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		this end, Alinta supports ERM's proposal to amend clause 7A.2.8A as part of its submission in the first submission period.	cease to apply because a Balancing Facility is returning from a Planned Outage. The Rule Change Panel proposes to consider changes to gate closure times on a more general basis as part of its assessment of the Rule Change Proposal: Implementation of 30-Minute Balancing Gate Closure (RC_2017_02). See also the response to Issue 6 in Appendix B of this report.
36	AEMO	 AEMO suggests that the proposed drafting in the CFFS could be clarified through consistent use of terminology and provides several suggestions intended to improve consistency and clarity based on the following principles: Only when: an Outage Plan has been Accepted is it a Scheduled Outage. a Scheduled Outage has been approved is it a Planned Outage. a Scheduled Outage or Opportunistic Maintenance has not been approved is it a Forced Outage. an Opportunistic Maintenance has been approved is it a Planned Outage. A Planned Outage cannot be approved. A Planned Outage is an approved Scheduled Outage or Opportunistic Maintenance request. Opportunistic Maintenance is not considered a Planned Outage unless it has been approved by System 	See Appendix F of this report. Additionally, the Rule Change Panel agrees that the unavailable quantities reported in Balancing Submissions should reflect Forced Outages (and Consequential Outages) as well as Planned Outages. The Rule Change Panel also notes that, since the publication of the CFFS, it has made numerous additional changes to the proposed Amending Rules in consultation with AEMO

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		 Management (MR 3.19.11). Therefore, terms such as 'proposed Planned Outage' inherently do not include Opportunistic Maintenance. From a Balancing Market perspective, it is important for unavailability to reflect both Planned and Forced Outages. 	
37	AEMO	AEMO suggests the following changes to the drafting of proposed clause 3.18.2A in the CFFS: (b) A Market Participant must notify System Management of a Small Outage Facility Outage Plan-proposed Planned Outage if: i. the Market Participant intends to make some or all of a Small Outage Facility's capacity unavailable; and ii. the capacity would otherwise be available for the duration of the Small Outage Facility Outage Plan proposed Planned Outage (h) Subject to clause 3.19.2C, a Market Participant must not notify System Management of a Small Outage Facility Outage Plan proposed Planned Outage for a Scheduled Generator or Non-Scheduled Generator under clause 3.18.2A(b) if the Market Participant does not expect in good faith that the capacity to which the notice applies would otherwise be available for dispatch for the duration of the Small Outage Facility Outage Plan proposed Planned Outage.	The Rule Change Panel does not agree with the suggested changes, as the references in question are to a proposed outage rather than a plan for that outage (e.g. the drafting refers to "the duration of the proposed Planned Outage"). See Appendix F of this report for further details.

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
38	AEMO	AEMO suggests the following changes to the drafting of proposed clause 3.19.2A in the CFFS: If: (a) a Market Participant intends to make some or all of an Equipment List Facility's capacity unavailable; and (b) the capacity would otherwise be available for the duration of the proposed Scheduled Outage or Opportunistic Maintenance, then the Market Participant must request approval for a Planned Scheduled Outage or Opportunistic Maintenance from System Management in accordance with section 3.18 and this section 3.19.	The Rule Change Panel prefers to retain the term "proposed outage" in clause 3.19.2A(b) but has made the suggested change to the final paragraph of the clause to clarify that the clause applies to both kinds of Planned Outage. See Appendix F of this report for further details.
39	AEMO	AEMO suggests the following changes to the drafting of proposed clause 3.19.2B in the CFFS: Subject to clause 3.19.2D, a Market Participant must not request approval of a proposed Planned Scheduled Outage or Opportunistic Maintenance for a Scheduled Generator or Non-Scheduled Generator under clauses 3.19.1 or 3.19.2 if the Market Participant does not expect in good faith that, if System Management rejected the request, the capacity to which the request applies would be available for dispatch for the duration of either the proposed Planned Scheduled Outage or Opportunistic Maintenance.	The Rule Change Panel notes that it has made more extensive changes to the proposed clause to reflect that the clause now only applies to Opportunistic Maintenance and to incorporate the proposed refinements to the availability declaration requirement.
40	AEMO	AEMO suggests several changes to the drafting of proposed clause 3.19.2C in the CFFS, to replace "Planned Outage" with "Scheduled Outage or Opportunistic Maintenance".	The Rule Change Panel notes that it has replaced proposed clause 3.19.2C with new clauses 3.18.9B (for Scheduled Outages) and 3.19.2F (for Opportunistic Maintenance).

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
41	AEMO	AEMO suggests the following changes to the drafting of proposed clause 3.19.2D in the CFFS: Clauses 3.18.2A(h), 3.19.2B, 3.19.2C and 3.19.3B do not apply where: (a) the Scheduled proposed Planned Outage or Opportunistic Maintenance will immediately follow a Scheduled Outage of the relevant capacity; or (b) the Market Participant reasonably expects that the relevant capacity would be subject to a Consequential Outage if the Scheduled proposed Planned Outage or Opportunistic Maintenance did not proceed.	The Rule Change Panel has retained the term "proposed Planned Outage" in this clause (now renumbered to 3.19.2G) to avoid unnecessarily extending the clause, and because the proposed Planned Outages to which clause 3.18.2A(h) applies are not classified as Scheduled Outages or Opportunistic Maintenance. See Appendix F of this report for further details.
42	AEMO	AEMO suggests the following changes to the drafting of proposed clause 3.19.4A in the CFFS: If System Management does not provide a Market Participant or Network Operator with its decision on a request for approval of a Planned Scheduled Outage or Opportunistic Maintenance by 30 minutes before Balancing Gate Closure for the Trading Interval during which the outage is proposed to commence, then, for the purposes of the Market Rules, the request is deemed to be rejected.	The Rule Change Panel has made the suggested changes to clause 3.19.4A as it considers they increase the clarity of the clause by emphasising that the clause applies to both types of Planned Outage.
43	AEMO	AEMO suggests the following changes to the drafting of proposed clause 7A.2.8A(a) in the CFFS: A Market Participant (other than Synergy in respect of the Balancing Portfolio) must, for each of its Balancing Facilities, and for each Trading Interval in the Balancing Horizon, use its best endeavours to ensure that, at all times, any of the Facility's capacity that is:	The Rule Change Panel has not made the suggested change to proposed clause 7A.2.8A(a) because the obligations relating to capacity subject to a Forced Outage (or a Consequential Outage) are covered by other clauses (e.g. clause 7A.2.10). The Rule Change Panel also notes that it has updated clause 7A.2.8(b) to refer only to

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		 (a) subject to an approved Planned Outage or Forced Outage; or (b) subject to an outstanding request for approval of a Planned Scheduled Outage or Opportunistic Maintenance, 	Opportunistic Maintenance, because the new proposed deadline for approval of Scheduled Outages is well before the first Trading Interval of a Scheduled Outage enters the Balancing Horizon.
44	AEMO	AEMO suggests the following changes to the drafting of proposed clause 7A.2.9(g) in the CFFS: must, if System Management approves a Planned Scheduled Outage or Opportunistic Maintenance for a Facility in the Balancing Portfolio and a Trading Interval after the latest time specified in clause 7A.2.9(d), update its Balancing Submission for the Trading Interval as soon as practicable, but before Balancing Gate Closure for the Trading Interval, to:	The Rule Change Panel notes that it has made extensive changes to clause 7A.2.9(g) since the publication of the CFFS. The relevant drafting in the revised clause refers to approval of a request for Opportunistic Maintenance, because Scheduled Outages are no longer approved in the timeframes to which clause 7A.2.9(g) applies.
45	AEMO	AEMO suggests the following changes to the drafting of proposed clause 7A.2.9A in the CFFS: Synergy must, to the extent it is able to update its Balancing Submissions subject to clauses 7A.2.9(d)-(g) (as applicable), for each Facility in the Balancing Portfolio, and for each Trading Interval in the Balancing Horizon, use its best endeavours to ensure that, at all times: (a) any of the Facility's capacity that is subject to an approved Planned Outage or Forced Outage is declared as unavailable in the Balancing Submission for the	 The Rule Change Panel has not made the suggested changes to clause 7A.2.9A(a) because: the inclusion of the word 'approved' in the clause, while strictly tautological, would assist a reader by clarifying the distinction between the capacity described in this clause and the capacity described in clause 7A.2.9A(b) (i.e. capacity subject to a request that has not yet been approved); and

Issue	Submitter	Comment/Issue Raised	Rule Change Panel's Response
		Balancing Portfolio and that Trading Interval, except where that Facility is subject to a Commissioning Test; and (b) any of the Facility's capacity that is subject to an outstanding request for approval of a Planned Scheduled Outage or Opportunistic Maintenance is declared as available in the Balancing Submission for the Balancing Portfolio and that Trading Interval.	 the obligations relating to capacity subject to a Forced Outage are already covered in clause 7A.2.9. The Rule Change Panel also notes that it has updated clause 7A.2.8A(b) to refer only to Opportunistic Maintenance, because Scheduled Outages are no longer approved in the timeframes to which clause 7A.2.8A(b) applies.
46	AEMO	AEMO suggests several changes to the drafting of proposed clauses 7A.2.9B, 7A.2A.1(a), 7A.2A.2(a) and 7A.2A.3 to replace the terms "previously approved Planned Outage" and "approved Planned Outage" with "Planned Outage".	The Rule Change Panel has not made the suggested changes because the words that AEMO proposes to delete, while strictly tautological, would assist a reader by clarifying the conditions under which the relevant obligations apply (or in the case of clause 7A.2A.3, do not apply).
47	AEMO	Under proposed clauses 3.19.4A and 3.19.2(a)(ii), unless a Participant's Opportunistic Maintenance request is approved 30 minutes prior to the relevant Balancing Gate Closure, it is deemed to be rejected. In such a situation, the Market Participant will be required to update the relevant Balancing Submission but may not have sufficient time to do so. Further, other Market Participants would be unable to respond to the updated Balancing Submission. AEMO suggests that, as such, Market Participants may benefit from a deemed rejection occurring an hour prior to Balancing Gate Closure.	RCP Support sought clarification on the rationale for AEMO's suggestion during a meeting held on 24 January 2019. AEMO advised that it had no concerns about the proposed 30-minute deadline in relation to its own operations, and agreed that since stakeholders have reiterated their support for this deadline over several years of consultation there was no need to re-open the matter.

Appendix E. Further Amendments to the Proposed Amending Rules

The Rule Change Panel proposes to make some further amendments to the proposed Amending Rules following the further submission period. Note that the base drafting in this appendix assumes the Amending Rules for RC_2014_06 have commenced, and includes changes (specified in Appendix A of this report) made by the Rule Change Panel to the original proposed Amending Rules to account for the changes made to the Market Rules since the publication of the Rule Change Proposal.

The further amendments are as follows (deleted text, added text, clauses that are included for context but not amended):

- 3.18. Outage Scheduling
- 3.18.1. Where a reference is made to an outage of a Facility or item of equipment in clauses 3.18, 3.19, 3.20 and 3.21 this section 3.18 and sections 3.19, 3.20 and 3.21, this includes partial and complete outages and de-ratings of the Facility or item.

New clause 3.18.1A specifies a materiality threshold for the logging of Outages for Non-Scheduled Generators.

3.18.1A. The obligations specified in this section 3.18 and sections 3.19 and 3.21 to request or report Outages do not apply to Market Participants in respect of an outage of a Non-Scheduled Generator if the average MW de-rating over the relevant Trading Interval is less than:

min (0.1 × Nameplate Capacity, 10)

where Nameplate_Capacity is the MW quantity provided for the Non-Scheduled Generator under Appendix 1(e)(ii).

New clause 3.18.1B provides clarification on the concept of 'unavailable for service' as it applies to outage planning.

3.18.1B. For the purposes of this section 3.18 and section 3.19, capacity or capability associated with an Outage Facility is deemed to be unavailable for service in a Trading Interval if the capacity or capability could not, in response to an instruction or direction to the Market Participant or Network Operator from System

Management that was consistent with the Outage Facility's Equipment Limits, any relevant limits or information provided to System Management in accordance with the Power System Operation Procedure referred to in clause 2.28.3A(a), or any relevant limits specified in an Ancillary Service Contract (as applicable), be used to provide the relevant service expected from the capacity or capability of the Outage Facility. To avoid doubt, capacity of a Non-Scheduled Generator is not deemed to be unavailable for service because of a shortfall of the intermittent energy source used by the Non-Scheduled Generator to generate electricity.



New clause 3.18.1C provides clarification on the concept of 'maintenance' as it applies to outage planning.

3.18.1C. For the purposes of this section 3.18 and section 3.19, references to 'maintenance' include but are not limited to preventative maintenance, corrective maintenance, plant inspections, upgrades and tests that require some or all of the capacity or capability associated with an Outage Facility being unavailable for service when such maintenance would be reasonably considered to be required in accordance with good electricity industry practice.

Clause 3.18.2 has been amended to:

- include the defined term "Equipment List" in clause 3.18.2(a)
- clarify when System Management should update the Equipment List (clause 3.18.2(b)
- restrict the obligation under clause 3.18.2(c)(i) to transmission system equipment
- require the inclusion of all Scheduled Generators with Capacity Credits in the Equipment List, not just those with a nameplate capacity equal to exceeding 10 MW

3.18.2.

- (a) System Management must maintain and publish a list of all equipment on the SWIS that it determines should be subject to outage scheduling in accordance with this section 3.18 and sections 3.19, 3.20 and 3.21 ("Equipment List").
- (b) System Management must review and update the Equipment List from time to time. If System Management updates the Equipment List, it must publish the updated Equipment List on the Market Web Site as soon as practicable. System Management must, as soon as practicable after it becomes aware of an error relating to the Equipment List, or otherwise determines that a change is required to the Equipment List, update the Equipment List to address the error or reflect the change and publish the updated Equipment List on the Market Web Site.
- (c) The Equipment List must include:
 - any part of a transmission system or a distribution system (however defined by System Management) that could limit the output of a generation system that System Management has included on the Equipment List;
 - all Scheduled Generators and Non-Scheduled Generators holding Capacity Credits with a Standing Data nameplate capacity of at least 10 MW;
 - <u>iii.</u> all Non-Scheduled Generators holding Capacity Credits with a Standing Data nameplate capacity that equals or exceeds 10 MW;
 - iii.iv. all generation systems to which clause 2.30B.2(a) relates with a nameplate capacity of at least that equals or exceeds 10 MW;



- iv.v. all Registered Facilities subject to an Ancillary Services Contract; and
- v.vi. any other equipment that System Management determines must be subject to outage scheduling to maintain Power System Security and Power System Reliability.
- (d) The Equipment List may specify that an Equipment List Facility is subject to outage scheduling by System Management only at certain times of the year.
- (e) [Blank]
- (f) A Market Participant or a Network Operator must schedule outages for each of its Equipment List Facilities. Outages must be scheduled in accordance with this section 3.18 and sections 3.19, 3.20 and 3.21.

Clause 3.18.2A has been amended to:

- change the selection criteria in clause 3.18.2A(a) to require notification of proposed Planned Outages for all Scheduled Generators, Non-Scheduled Generators and generation systems supporting Intermittent Loads that are not Equipment List Facilities (note the group name has been changed from Small Outage Facility to Self-Scheduling Outage Facility because the Facilities may have nameplate capacities equal to or exceeding 10 MW)
- clarify the circumstances under which a Market Participant may/must notify System
 Management of a proposed Planned Outage, in accordance with the revised availability
 requirement framework
- clarify the rules around amending or withdrawing a notice of a proposed Planned Outage, with the intent of maintaining consistency with the treatment of Equipment List Facilities as far as practicable
- update the drafting to remove any implication that a Facility must be available for service immediately prior to the start of a Planned Outage

3.18.2A.

- (a) If a generation system:
 - i. is-either: a Scheduled Generator, a Non-Scheduled Generator or a generation system to which clause 2.30B.2(a) relates; and
 - a Scheduled Generator or Non-Scheduled Generator with a Standing Data nameplate capacity of less than 10 MW; or
 - a generation system, with a nameplate capacity of less than
 10 MW, to which clause 2.30B.2(a) relates; and
 - ii. is not required to be included in on the Equipment List under clause 3.18.2(c)(v),

then the relevant Market Participant is not required to schedule outages in accordance with this section 3.18 and sections 3.19 and 3.20 for that generation system ("Small-Self-Scheduling Outage Facility") other than as required by this clause 3.18.2A.



- (b) A Market Participant must notify System Management of a proposed Planned Outage if, and only if:
 - the Market Participant intends to make some or all of a Small Outage
 Facility's capacity unavailable that some or all of the capacity of its
 Self-Scheduling Outage Facility will be unavailable for service for a
 period for the purpose of maintenance; and
 - ii. <u>subject to clause 3.19.2G, the Market Participant is not aware that the capacity would otherwise be available for the duration of the proposed Planned Outage unavailable for service for any part of the duration of the proposed Planned Outage.</u>
- (c) The notice under clause 3.18.2A(b) must be given:
 - for an outage exceeding 24 hours in duration, no later than 10:00 AM on the day prior to the Scheduling Day for the Trading Day in which the requested outage proposed Planned Outage is due to commence; and
 - ii. for an outage of up to 24 hours in duration, no later than 30 minutes before Balancing Gate Closure for the Trading Interval in which the requested outage proposed Planned Outage is due to commence.
- (d) The notice under clause 3.18.2A(b) must include the information specified in clause 3.18.6. For the purposes of this clause 3.18.2A(d), each reference to an "Equipment List Facility" in clause 3.18.6 is to be read as a reference to a "Small Self-Scheduling Outage Facility".
- (e) System Management is deemed to have approved each-<u>outage_proposed</u>

 <u>Planned Outage for a Self-Scheduling Outage Facility</u> that is notified under clauses 3.18.2A(b) or 3.18.2A(g) and in accordance with clauses 3.18.2A(c) and 3.18.2A(d). The deemed approval takes effect when System Management receives the notice.
- (f) Where a Market Participant no longer-plans to de-rate or remove a Small Outage Facility from service, intends that the relevant capacity of its Self-Scheduling Outage Facility will be unavailable for service for the purpose of maintenance it must inform System Management and withdraw the notice of the proposed Planned Outage as soon as practicable.
- (g) Where a Market Participant intends to de-rate or remove a Small Outage
 Facility from service for maintenance at a different time than indicated in its
 notice under clause 3.18.2A(b), it must submit a revised notice to System
 Management as soon as practicable. If a Market Participant becomes aware
 of any changes to the information provided to System Management in a
 notice of a proposed Planned Outage for a Self-Scheduling Outage Facility,
 then the Market Participant must submit a revised notice to System
 Management for the Self-Scheduling Outage Facility as soon as practicable
 that complies with the requirements of a notice of a proposed Planned
 Outage for a Self-Scheduling Outage Facility in this clause 3.18.2A.



- (h) Subject to clause 3.19.2C, a Market Participant must not notify System Management of a proposed Planned Outage for a Scheduled Generator or Non-Scheduled Generator under clause 3.18.2A(b) if the Market Participant does not expect in good faith that the capacity to which the notice applies would otherwise be available for dispatch for the duration of the proposed Planned Outage.
- (h) If a Market Participant submits a revised notice of a proposed Planned

 Outage to System Management for a Self-Scheduling Outage Facility in accordance with clause 3.18.2A(g) that proposes:
 - i. a new start time for the proposed Planned Outage that is earlier than the previous proposed start time;
 - ii. a new end time for the proposed Planned Outage that is later than the previous proposed end time; or
 - iii. an increase in the quantity of de-rating,

then for the purposes of the Market Rules the original notice is deemed to be withdrawn and the revised notice is deemed to be a new notice submitted under clause 3.18.2A(b).

3.18.3.

- (a) If a Market Participant's or Network Operator's Facility (or an item of equipment forming part of a Facility or an item of equipment which is a generation system to which clause 2.30B.2(a) relates) is on the Equipment List, then the Market Participant or Network Operator may request that the Economic Regulation Authority reassess the inclusion of the Facility or item of equipment on the Equipment List in accordance with this clause 3.18.3.
- (b) Following a request by a Market Participant or Network Operator under clause 3.18.3(a), the Economic Regulation Authority must consult with System Management and the Market Participant or Network Operator concerning whether the Equipment List Facility should remain on the Equipment List.
- (c) <u>The Economic Regulation Authority may give a direction to System</u>
 Management that an Equipment List Facility should not remain on the Equipment List where it finds that:
 - System Management has not followed the Market Rules or the Power System Operation Procedure in-compiling determining the Equipment List; and
 - ii. if the Market Rules and the Power System Operation Procedure had been followed, then the Equipment List Facility would not have been on the Equipment List.
- (d) If the Economic Regulation Authority gives a direction to System Management under clause 3.18.3(c), then System Management must remove the relevant Equipment List Facility from the Equipment List.



- 3.18.4. System Management must maintain an outage schedule that contains details of each Outage Plan:
 - (a) that System Management has accepted under clause 3.18.13; or
 - (b) that the Economic Regulation Authority has directed System Management to include in the outage schedule, under clause 3.18.15(f).

Clause 3.18.4A has been amended to use consistent terminology and remove any implication that an Outage Facility must be available for service immediately prior to the start of a Planned Outage.

3.18.4A. A proposal submitted to System Management in accordance with this section 3.18 by a Market Participant or Network Operator in which permission is sought from System Management for the scheduling of the removal from service (or de-rating) of an Equipment List Facility some or all of the capacity or capability of an Equipment List Facility to be unavailable for service for a period is a proposed outage plan ("Outage Plan").

3.18.5. Market Participants:

- (a) must, subject to clause 3.18.5A, 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:
 - the outage relates to an Equipment List Facility in respect of which a Market Participant holds Capacity Credits at any time during the proposed outage;
 - ii. the Equipment List Facility has a nameplate capacity greater than 10 MW: and
 - iii. the proposed outage has a duration of more than one week; and
- (b) otherwise may submit an Outage Plan to System Management not more than three years and not less than two days in advance of the proposed outage.
- 3.18.5A. Market Participants may submit an Outage Plan to which clause 3.18.5(a) relates to System Management less than one year, but not less than two days, in advance of the proposed outage, but in such instances:
 - (a) System Management must give priority to Outage Plans to which clause 3.18.5(a) relate 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 clause 3.18.5A relates in the order they are received; and
 - (c) System Management must give no special priority to Outage Plans to which this clause 3.18.5A relates relative to Outage Plans to which clause 3.18.5(a) does not relate.



- 3.18.5B. Network Operators may submit an Outage Plan to System Management not more than three years and not less than two days in advance of the proposed outage.
- 3.18.5C. Where a Network outage is likely to unduly impact the operation of one or more Market Participant Registered 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 Participant Registered Facilities.

New clause 3.18.5D prevents the submission of Outage Plans that do not meet the availability requirement for a Planned Outage. The obligation applies to all Equipment List Facilities.

- 3.18.5D. Subject to clause 3.19.2G, a Market Participant or Network Operator must not submit an Outage Plan to System Management if it is aware or ought to be aware in the circumstances that, if System Management rejected the Outage Plan, any of the capacity or capability to which the Outage Plan applies would be unavailable for service for any part of the relevant outage period.
- 3.18.6. The information submitted in an Outage Plan must include:
 - (a) the identity of the Equipment List Facility that will be unavailable;
 - (b) the quantity of any de-rating where, if the <u>Equipment List</u> Facility is a generating system, this quantity is in accordance with clause 3.21.5;
 - (c) the reason for the outage;
 - (d) the proposed start and end times of the outage;
 - (e) an assessment of risks that might extend the outage;
 - (f) details of the time it would take the Equipment List Facility to return to service, if required;
 - (g) contingency plans for the early return to service of the Equipment List Facility ("Outage Contingency Plans"); and
 - (h) if the Outage Plan is submitted by a Network Operator, a confirmation that the Network Operator has used its best endeavours to inform any Market Generator with a Scheduled Generator or Non-Scheduled Generator impacted by the unavailability of the relevant Equipment List Facility of the proposed outage.

New clause 3.18.6A prevents a Market Participant or Network Operator from requesting a Planned Outage for a period it knows is insufficient but for which it can meet the availability requirement, and then requesting an extension outage that is exempt from the availability requirement.

3.18.6A. A Market Participant or Network Operator must not submit an Outage Plan if it is aware or ought to have been aware in the circumstances that it will not be possible

to complete the proposed maintenance and make the relevant capacity or capability available for service by the end of the proposed outage period.

Clause 3.18.7 has been amended to remove any implication that an Outage Facility must be available for service immediately prior to the start of a Planned Outage.

- 3.18.7. 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 Equipment List Facility, for maintenance that the relevant capacity or capability of its Equipment List Facility will be unavailable for service for the duration of the outage period described in clause 3.18.6(d) for the purpose of maintenance.
- 3.18.7A. 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.

Clause 3.18.8 has been amended to:

- remove any implication that an Outage Facility must be available for service immediately prior to the start of a Planned Outage
- explicitly require the withdrawal of the Outage Plan in the specified circumstances.
- 3.18.8. Where a Market Participant or Network Operator no longer—plans to remove from service, or de-rate, the relevant Equipment List Facility, for maintenance intends that the relevant capacity or capability of its Equipment List Facility will be unavailable for service for the purpose of maintenance it must inform System Management and withdraw the relevant Outage Plan as soon as practicable.

Clause 3.18.9 has been amended to clarify the circumstances under which a Market Participant or Network Operator must submit a revised Outage Plan.

3.18.9. Where a Market Participant or Network Operator intends to remove from service, or de-rate, the relevant Equipment List Facility, 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. If a Market Participant or Network Operator becomes aware of any changes to the information provided to System Management in an Outage Plan, then the Market Participant or Network Operator must as soon as practicable submit a revised Outage Plan to System Management for the relevant Equipment List Facility that complies with the requirements of an Outage Plan in this section 3.18.

New clause 3.18.9A specifies which revisions to an Outage Plan should constitute a new Outage Plan.

- 3.18.9A. If a Market Participant or Network Operator submits a revised Outage Plan in accordance with clause 3.18.9 to System Management that proposes:
 - (a) a new start time for the proposed outage that is earlier than the previous proposed start time;
 - (b) a new end time for the proposed outage that is later than the previous proposed end time; or
 - (c) an increase in the quantity of de-rating,

then for the purposes of the Market Rules the original Outage Plan is deemed to be withdrawn and the revised Outage Plan is deemed to be a new Outage Plan.

New clause 3.18.9B specifies the actions that a Market Participant or Network Operator must take if it becomes aware that its proposed Scheduled Outage no longer satisfies the availability requirement for a Planned Outage. Clause 3.18.9B(a) gives the participant an option (not considered in the CFFS) to amend its Outage Plan to make it compliant. The obligations apply to all Equipment List Facilities.

- 3.18.9B. Subject to clauses 3.18.9C and 3.19.2G, if a Market Participant or Network Operator becomes aware, or ought to have become aware in the circumstances, that, if

 System Management rejected an Outage Plan for its Equipment List Facility, any of the capacity or capability to which the Outage Plan applies would be unavailable for service for any part of the proposed outage period, then the Market Participant or Network Operator must either:
 - (a) as soon as practicable, submit a revised Outage Plan to System

 Management for the Equipment List Facility that amends the proposed outage period or reduces the quantity of de-rating (or both) to meet the requirements of clause 3.18.5D; or
 - (b) as soon as practicable:
 - i. notify System Management; and
 - ii. if System Management has not yet scheduled the Outage Plan for the Equipment List Facility in its outage schedule, withdraw the Outage Plan.

New clause 3.18.9C exempts a Rule Participant from having to comply with clause 3.18.9B if it has a Scheduled Outage booked for routine maintenance at the latest possible time (which was scheduled while there was still time to take the outage earlier if necessary) and the only change is that there is now no longer time to bring forward the outage.

- 3.18.9C. A Market Participant or Network Operator is not required to comply with clause 3.18.9B in respect of an Outage Plan if:
 - (a) the Outage Plan has been scheduled in System Management's outage schedule;



- (b) the outage could have been brought forward at the time the Outage Plan was scheduled in System Management's outage schedule, if System Management had rejected the Outage Plan; and
- (c) the only reason why, if System Management now rejected the Outage Plan, any of the capacity or capability to which the Outage Plan applies would be unavailable for service for any part of the proposed outage period is that there is no longer time to bring forward the outage.

Clause 3.18.10 has been amended to clarify that System Management's assessment of Outage Plans is subject to the restrictions in clauses 3.18.10A and 3.18.10B.

- 3.18.10. Subject to clauses 3.18.10A and 3.18.10B, System Management must use a risk assessment process using the criteria set out in clause 3.18.11 to evaluate Outage Plans:
 - (a) when an Outage Plan is received or revised; and
 - (b) on an ongoing basis as part of the Medium Term PASA and Short Term PASA studies.

New clause 3.18.10A prohibits System Management from accepting a new Outage Plan that it is aware does not meet the availability requirement. The obligation applies to all Equipment List Facilities.

3.18.10A. Subject to clause 3.19.2G, System Management must not schedule a new Outage
Plan in its outage schedule if it is aware or ought to be aware in the circumstances
that, if it rejected the Outage Plan, any of the capacity or capability to which the
Outage Plan applies would be unavailable for service for any part of the proposed
outage period.

New clause 3.18.10B requires System Management to delay the evaluation of a new Outage Plan for capacity that is subject to an 'availability-challenged' Planned Outage or a Forced Outage until certain conditions are satisfied. The obligation applies to all Equipment List Facilities.

- 3.18.10B.If, at the time System Management begins its evaluation of a new Outage Plan:
 - (a) the relevant capacity or capability is subject to a Planned Outage for which

 System Management has received a notification under clauses 3.18.9B(b)(i)

 or 3.19.2F(b)(i);
 - (b) the relevant capacity or capability is subject to a Planned Outage for which

 System Management is otherwise aware that it should have received a

 notification under clauses 3.18.9B(b)(i) or 3.19.2F(b)(i) from the Market

 Participant or Network Operator; or
 - (c) the relevant capacity or capability is subject to a Forced Outage, then System Management must delay its evaluation of the Outage Plan until:



- (d) the relevant capacity or capability is returned to service; or
- (e) System Management receives evidence to its satisfaction from the Market

 Participant or Network Operator that the relevant capacity would be capable
 of being made available for service before the start of the proposed outage
 period in the Outage Plan.

Clause 3.18.11 has been amended to reflect that some registered generators are connected to the distribution system.

- 3.18.11. System Management must apply the following criteria when evaluating Outage Plans:
 - (a) the capacity of the total generation and Demand Side Management Facilities remaining in service must be greater than the second deviation load forecast published in accordance with clause 3.16.9(a)(iii) or clause 3.17.9(a)(iii), as applicable;
 - (aA) the total capacity of the generation Facilities remaining in service, and System Management's reasonable forecast of the total available Demand Side Management, must satisfy the Ready Reserve Standard described in clause 3.18.11A:
 - (b) the transmission <u>system and distribution system</u> capacity remaining in service must be capable of allowing the dispatch of the capacity referred to in clause 3.18.11(a);
 - (c) the Facilities remaining in service must be capable of meeting the applicable Ancillary Service Requirements;
 - (d) the Facilities remaining in service must allow System Management to ensure the power system is operated within the Technical Envelope; and
 - (e) notwithstanding the criteria set out in clause 3.18.11(a) to (d), 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.
- 3.18.11A. The Ready Reserve Standard requires that the available generation and demandside capacity at any time satisfies the following principles:
 - (a) Subject to clause 3.18.11A(c), the additional energy available within fifteen minutes must be sufficient to cover:
 - i. 30% of the total output, including Parasitic Load, of the generation unit synchronized to the SWIS with the highest total output at that time:
 - ii. plus the Minimum Frequency Keeping Capacity as defined in clause 3.10.1(a).



- (b) Subject to clause 3.18.11A(c), and in addition to the additional energy described in clause 3.18.11A(a), the additional energy available within four hours must be sufficient to cover:
 - i. 70% of the total output, including Parasitic Load, of the generation unit synchronized to the SWIS with the second highest total output at that time:
 - ii. less the Minimum Frequency Keeping Capacity as defined in clause 3.10.1(a).
- (c) System Management may relax the requirements in clause 3.18.11A(a) and (b) in the following circumstances:
 - i. where System Management expects that the load demand will be such that it exceeds the second standard deviation peak load forecast level, as described in clause 3.17.9(a), used in the most recently published Short Term PASA for that Trading Interval;
 - ii. during the four hours following an event that has caused System Management to call on additional energy maintained in accordance with clauses 3.18.11A(a) or (b).
- 3.18.12. Except to the extent required by the criteria in clause 3.18.11 and to the extent allowed by clause 3.18.5A, in evaluating Outage Plans, System Management must not show bias towards a Market Participant or Network Operator in regard to its Outage Plans.
- 3.18.13. 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:
 - (a) 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. 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.
 - (b) Where System Management finds that an Outage Plan is acceptable, then it must schedule the Outage Plan in System Management's outage schedule accordingly and inform the Market Participants or Network Operators that submitted the Outage Plans.
 - (c) 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. System Management must:
 - consult with the Market Participant or Network Operator about those circumstances;



- ii. determine a date by which it expects to have sufficient information on those circumstances to reassess the Outage Plan;
- iii. inform the Market Participant or Network Operator of the date; and
- iv. reassess the outage plan using the criteria under clause 3.18.11 following the date specified in accordance with clause 3.18.13(c)(ii);
- (d) Where System Management finds that an Outage Plan is unacceptable, then System Management must inform all Market Participants and Network Operators affected and must negotiate with the affected Market Participants and Network Operators to attempt to reach agreement as to System Management's outage schedule, and:
 - If agreement is reached, then the affected Market Participants and Network Operators must resubmit Outage Plans to System Management; or
 - ii. If no agreement is reached within 15 Business Days, System Management must:
 - 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;
 - 2. 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
 - 3. notify each affected Market Participant whether its Outage Plan has been scheduled.
- (e) Where, as a result of an evaluation, the status of an Outage Plan that was previously acceptable or acceptable under certain conditions changes then System Management must modify its outage schedule accordingly.

Clause 3.18.14 has been amended to:

- use consistent terminology; and
- remove the second sentence from clause 3.18.14(b), which is no longer required because new clause 3.18.9A covers the identification and treatment of revised Outage Plans that should be treated as new Outage Plans for evaluation and prioritisation purposes.
- 3.18.14. System Management must use the following criteria when making a decision referred to in clause 3.18.13(d)(ii), in descending order of priority:
 - (a) System Management must give priority to the criteria in clause 3.18.11;
 - (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. For the purposes of this clause an Outage Plan which has been entered into the outage schedule and has subsequently been revised in accordance with clause 3.18.9 is considered to



- have been entered into the schedule on the date the most recent revision of the Outage Plan was submitted under that clause;
- (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 or capability that would be taken out of service and the duration of the outage.
- 3.18.15. Where System Management informs a Market Participant or Network Operator that an Outage Plan has not been scheduled or has been removed from System Management's outage schedule under clause 3.18.13(d)(ii), the Market Participant or Network Operator may apply to the Economic Regulation Authority to reassess the decision in accordance with the following procedures:
 - (a) A Participant or Network Operator can only apply for the Economic Regulation Authority to reassess a decision on the grounds that System Management has not followed the Market Rules or its Power System Operation Procedure;
 - (b) The Market Participant or Network Operator must submit a written application to the Economic Regulation Authority, and forward a copy to System Management, stating the reasons why it considers that System Management's decision under clause 3.18.13(d)(ii) should be reassessed and providing any supporting evidence:
 - i. within ten Business Days of being informed of System Management's decision; and
 - ii. no later than five Business Days prior to the date when the outage would have commenced.
 - (c) Until the Economic Regulation Authority 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.
 - (d) System Management must submit records relating to System Management's outage schedule around the date of the relevant outage to <u>the</u> Economic Regulation Authority within two Business Days of being informed of the Market Participant's or Network Operator's application under paragraph (b).
 - (e) <u>The Economic Regulation Authority must consult with System Management and the Market Participant or Network Operator concerning the Outage Plan, and must make a complete reassessment by the earlier of:</u>
 - ten Business Days of receiving the application under paragraph (b);
 or



- ii. two Business Days prior to the date when the outage would have commenced.
- (f) The Economic Regulation Authority may give a direction to System Management that the Outage Plan should be scheduled in System Management's outage schedule where it finds that:
 - System Management has not followed the Market Rules or its Power System Operation Procedure; and
 - ii. if the Market Rules and the Power System Operation Procedure had been followed, then the Outage Plan would have been scheduled; and
- (g) Where the Economic Regulation Authority gives a direction to System Management that the Outage Plan should be scheduled in System Management's outage schedule, System Management must schedule it into the outage schedule in accordance with the direction.
- 3.18.16. Where System Management informs a Market Participant or Network Operator that an Outage Plan is unacceptable, and the Economic Regulation Authority does not give System Management a direction under clause 3.18.15(f), 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 in its outage schedule.
- 3.18.17. System Management must keep records of all of its outage evaluations and decisions made in accordance with this clause 3.18, together with the reasons for each outage evaluation and decision.
- 3.18.18. From time to time, and at least once in every five year period starting from Energy Market Commencement, the Economic Regulation Authority, with the assistance of System Management, must conduct a review of the outage planning process against the Wholesale Market Objectives. The review must include a technical study of the effectiveness of the criteria in clause 3.18.11 and a broad consultation process with Rule Participants.
- 3.18.19. At the conclusion of a review under clause 3.18.18, the Economic Regulation Authority must publish a report containing:
 - (a) the inputs and results of the technical study;
 - (b) the submissions made by Rule Participants in the consultation process and any responses to issues raised in those submissions;
 - (c) any recommended changes to the outage planning process, formulated as one or more Market Rule changes or Market Procedure changes.
- 3.18.20. If the Economic Regulation Authority recommends any changes in the report in clause 3.18.19, the Economic Regulation Authority must either submit a Rule



- Change Proposal in accordance with clause 2.5.1 or initiate a Procedure Change Process in accordance with clause 2.10, as the case may be.
- 3.18.21. System Management must document the procedure it follows in conducting outage planning in the Power System Operation Procedure and System Management, Market Participants and Network Operators must follow that documented Market Procedure when planning outages.

3.19. Outage Approval

Clause 3.19.1 has been amended to:

- remove the requirement for the approval request to specify the outage period, as this
 information is provided as part of the relevant Outage Plan
- reflect the relocation of the definition of Scheduled Outage to the Glossary
- 3.19.1. No later than 10:00 AM on the day prior to the Scheduling Day for the Trading Day in which the requested outage in System Management's outage schedule ("Scheduled Outage") a Scheduled Outage is due to commence, the relevant Market Participant or Network Operator must request that System Management approve the Scheduled Outage proceeding to proceed. The request must specify the Trading Intervals during which the Scheduled Outage will occur.

Clause 3.19.2 has been amended to:

- make the clause explicitly subject to the availability requirements in clause 3.19.2B
- remove the requirement in clause 3.19.2(b)(i) for the maintenance to be 'minor'
- remove the requirement in clause 3.19.2(b)(ii) that the outage not require any changes in scheduled energy or Ancillary Services
- place the onus for ensuring that a gap of at least 24 hours exists between Opportunistic
 Maintenance outage periods on the Market Participant or Network Operator
- 3.19.2. <u>Subject to clause 3.19.2B,</u> Market Participants and Network Operators may request that System Management approve an outage of an Equipment List Facility that is not a Scheduled Outage ("**Opportunistic Maintenance**"):
 - (a) at any time between:
 - 10:00 AM on the day prior to the Scheduling Day for the Trading Day in which the requested outage is due to commence; and
 - ii. 30 minutes before Balancing Gate Closure for the Trading Interval in which the requested outage is due to commence, and
 - (b) where:
 - the <u>requested</u> outage <u>must be is</u> to allow <u>minor</u> maintenance to be performed;

- ii. the outage must not require any changes in scheduled energy or Ancillary Services; and
- iii. the duration of the <u>requested</u> outage <u>must will</u> not exceed 24 hours;
- iii. the outage period is separated by at least 24 hours from any other

 Opportunistic Maintenance outage period for the Equipment List

 Facility; and
- iv. the request <u>must</u> includes all of the information specified in clause 3.18.6.

Clause 3.19.2A has been amended to:

- clarify that the obligation relates to Equipment List Facilities being unavailable for the purpose of maintenance
- remove any implication that an Outage Facility must be available for service immediately prior to the start of a Planned Outage
- update the availability requirement
- apply the obligation to all Equipment List Facilities

3.19.2A. If:

- (a) a Market Participant or Network Operator intends to make that some or all of an Equipment List Facility's capacity or capability will be unavailable for service for a period for the purpose of maintenance; and
- (b) the Market Participant or Network Operator is not aware that the Equipment

 <u>List Facility's</u> capacity or capability would not otherwise be available for

 <u>service</u> for the duration of the proposed-Outage outage,

then the Market Participant or Network Operator must request approval for a Planned Outage Scheduled Outage or Opportunistic Maintenance from System Management in accordance with section 3.18 and this section 3.19.

Clause 3.19.2B has been amended to:

- reflect the renumbering of proposed clause 3.19.2D to 3.19.2G
- update the availability requirement
- restrict the clause to requests for approval of Opportunistic Maintenance
- apply the obligation to all Equipment List Facilities
- 3.19.2B. Subject to clause 3.19.2DG, a Market Participant or Network Operator must not request approval of a proposed Planned Outage for a Scheduled Generator or Non-Scheduled Generator Opportunistic Maintenance under clauses 3.19.1 or clause 3.19.2 if the Market Participant does not expect in good faith or Network Operator is aware or ought to be aware in the circumstances that, if System Management rejected the request, any of the capacity or capability to which the request applies



would be <u>unavailable</u> for <u>dispatch</u> for the duration of the proposed Planned Outage service for any part of the relevant outage period.

The original proposed clause 3.19.2C is replaced by clause 3.18.9B (for Scheduled Outages) and new clause 3.19.2F (for Opportunistic Maintenance), which specify the actions that a participant must take if it becomes aware that its proposed Planned Outage no longer meets the availability requirement.

3.19.2C. Subject to clause 3.19.2D, if:

- (a) a Market Participant has requested approval under clauses 3.19.1 or 3.19.2 for a proposed Planned Outage of a Scheduled Generator or Non-Scheduled Generator:
- (b) System Management has not yet approved or rejected the request under clause 3.19.4; and
- (c) the Market Participant ceases to expect in good faith that, if System

 Management were to reject the request, the capacity to which the request
 applies would be available for dispatch for the duration of the proposed
 Planned Outage,

then the Market Participant must immediately notify System Management of the change in circumstances and withdraw the Market Participant's request for approval of the proposed Planned Outage.

New clause 3.19.2C requires a participant to withdraw an Opportunistic Maintenance request if it no longer intends to proceed with the outage.

3.19.2C. Where a Market Participant or Network Operator no longer intends to proceed with Opportunistic Maintenance that was requested under this section 3.19, it must inform System Management and withdraw the request as soon as practicable.

New clause 3.19.2D clarifies the circumstances under which a participant must submit a revised request for approval of Opportunistic Maintenance.

3.19.2D. If a Market Participant or Network Operator becomes aware of any changes to the information provided to System Management in a request for approval of Opportunistic Maintenance, then the Market Participant or Network Operator must submit a revised request to System Management for the relevant Equipment List Facility as soon as practicable in accordance with the requirements of a request for approval of Opportunistic Maintenance in this section 3.19.

New clause 3.19.2E specifies which revisions to a request for approval of Opportunistic Maintenance should constitute a new request.

3.19.2E. If a Market Participant or Network Operator submits a revised request for approval of Opportunistic Maintenance in accordance with clause 3.19.2D that proposes:



- (a) a new start time for the Opportunistic Maintenance that is earlier than the previous proposed start time;
- (b) a new end time for the Opportunistic Maintenance that is later than the previous proposed end time; or
- (c) an increase in the quantity of de-rating,

then for the purposes of the Market Rules the original request is deemed to be withdrawn and the revised request is deemed to be a new request.

New clause 3.19.2F specifies the actions that a Market Participant or Network Operator must take if it becomes aware that its proposed Opportunistic Maintenance request no longer satisfies the availability requirement for a Planned Outage. Clause 3.19.2F(a) gives the participant an option (not considered in the CFFS) to amend its request to make it compliant. The obligations apply to all Equipment List Facilities.

- 3.19.2F. Subject to clause 3.19.2G, if a Market Participant or Network Operator becomes aware, or ought to have become aware in the circumstances, that, if System

 Management rejected a request for approval of Opportunistic Maintenance for its Equipment List Facility, any of the capacity or capability to which the request applies would be unavailable for service for any part of the proposed outage period, then the Market Participant or Network Operator must either:
 - (a) as soon as practicable, submit a revised request to System Management for the Equipment List Facility that amends the proposed outage period or reduces the quantity of de-rating (or both) to meet the requirements of clause 3.19.2B; or
 - (b) as soon as practicable:
 - notify System Management; and
 - ii. withdraw the request for approval of Opportunistic Maintenance if System Management has not yet approved it.

Clause 3.19.2D (renumbered to 3.19.2G) has been amended to:

- update the list of clauses for which this clause provides an exemption
- extend the exemption in clause 3.19.2G(a) to Planned Outages that immediately follow Opportunistic Maintenance
- exclude outages that follow 'availability-challenged' Planned Outages from the exemption under clause 3.19.2G(a)
- extend the application of the clause to all Equipment List Facilities
- 3.19.2DG. Clauses 3.18.2A(h), 3.18.2A(b)(ii), 3.18.5D, 3.18.9B, 3.18.10A, 3.19.2B, 3.19.2C 3.19.2F and 3.19.3B do not apply where:
 - (a) the proposed Planned Outage will immediately follow a <u>Scheduled Planned</u>
 Outage of the relevant capacity or capability, and System Management has



- not received a notification under clauses 3.18.9B(b)(i) or 3.19.2F(b)(i) in respect of the earlier Planned Outage; or
- (b) the Market Participant or Network Operator reasonably expects that the relevant capacity or capability would be subject to a Consequential Outage if the proposed Planned Outage did not proceed.

New clause 3.19.2H allows a Market Generator to reduce the outage period reported in an Opportunistic Maintenance request for an off-line Scheduled Generator under certain circumstances.

- 3.19.2H. If, at the time a Market Generator submits a request for approval of Opportunistic

 Maintenance for a Scheduled Generator:
 - (a) the Facility is not synchronised; and
 - (b) the proposed start time for the maintenance work that is the subject of the request is before the time when the Facility could be synchronised in accordance with its relevant Equipment Limits,

then the Market Generator may exclude from the start of the proposed outage period in its request any Trading Intervals during which the Facility could not be synchronised in accordance with its Equipment Limits, provided that the Market Generator:

- (c) does not start the maintenance work that is the subject of the request until the request is approved by System Management; and
- (d) immediately withdraws the request if System Management has not approved the request prior to the Trading Interval in which the maintenance work that is the subject of the request is intended to commence.

Clause 3.19.3 has been amended to clarify that System Management's assessment of requests for approval of Scheduled Outages and Opportunistic Maintenance is subject to the restrictions in clauses 3.19.3B and 3.19.3C.

3.19.3. Subject to clauses 3.19.3A and 3.19.3B, 3.19.3B and 3.19.3C, System Management must assess the request for approval of a Scheduled Outage or Opportunistic Maintenance, based on the information available to System Management at the time of the assessment, and applying the criteria set out in clause 3.19.6.

Clause 3.19.3A has been amended to shift the onus for ensuring that a gap of at least 24 hours exists between Opportunistic Maintenance outage periods to the Market Participant or Network Operator (in clause 3.19.2).

- 3.19.3A. In assessing whether to grant a request for Opportunistic Maintenance, System Management:
 - (a) must not grant permission for Opportunistic Maintenance to begin prior to the first Trading Interval for which Opportunistic Maintenance is requested; and



- (b) [Blank]must not approve an Opportunistic Maintenance request for an Equipment List Facility where the Opportunistic Maintenance outage would commence within 24 hours of the end time of the most recent Opportunistic Maintenance outage for that Equipment List Facility; and
- (c) [Blank]
- (d) may decline to approve Opportunistic Maintenance for a facility where it considers that inadequate time is available before the proposed commencement time of the outage to adequately assess the impact of that outage.

Clause 3.19.3B has been amended to:

- reflect the renumbering of proposed clause 3.19.2D to 3.19.2G
- · update the availability requirement
- prohibit System Management from approving a request that it is aware does not meet the availability requirement
- limit the clause to approval of Opportunistic Maintenance requests
- 3.19.3B. Subject to clause 3.19.2DG, System Management-may decline to approve a Scheduled Outage or Opportunistic Maintenance for an Equipment List Facility where it considers that the capacity to which the request applies would not otherwise be available for dispatch for the duration of the proposed Planned Outage must not approve an Opportunistic Maintenance request for an Equipment List Facility if it is aware or ought to be aware in the circumstances that, if it rejected the request, any of the capacity or capability to which the request applies would be unavailable for service for any part of the proposed outage period.

New clause 3.19.3C requires System Management to delay approval of an Opportunistic Maintenance request for capacity that is currently subject to an 'availability-challenged' Planned Outage or Forced Outage until certain conditions are satisfied. The obligation applies to all Equipment List Facilities.

- 3.19.3C. If, at the time a Market Participant or Network Operator submits a request for approval of Opportunistic Maintenance under clause 3.19.2:
 - the relevant capacity or capability is subject to a Planned Outage for which

 System Management has received a notification under clauses 3.18.9B(b)(i)

 or 3.19.2F(b)(i);
 - (b) the relevant capacity or capability is subject to a Planned Outage for which

 System Management is otherwise aware that it should have received a

 notification under clauses 3.18.9B(b)(i) or 3.19.2F(b)(i) from the Market

 Participant or Network Operator; or
 - (c) the relevant capacity or capability is subject to a Forced Outage, then System Management must delay its assessment of the request until:



- (d) the relevant capacity or capability becomes available for service; or
- (e) System Management receives evidence to its satisfaction from the Market

 Participant or Network Operator that the relevant capacity or capability would

 be capable of being made available for service before the start of the

 proposed Opportunistic Maintenance.
- 3.19.4. System Management must either approve or reject the Scheduled Outage or Opportunistic Maintenance and inform the Market Participant or Network Operator of its decision as soon as practicable.

Clause 3.19.4A has been amended to set different deadlines for the approval of Scheduled Outages and Opportunistic Maintenance.

- 3.19.4A. If System Management does not provide a Market Participant or Network Operator with its decision on a request for approval of a Planned Outage by 30 minutes before Balancing Gate Closure for the Trading Interval during which the outage is proposed to commence, then, for the purposes of the Market Rules, the request is deemed to be rejected. Scheduled Outage or Opportunistic Maintenance:
 - (a) for Scheduled Outages, by 2:00 PM on the day prior to the Scheduling Day for the Trading Day in which the Scheduled Outage is proposed to commence; or
 - (b) for Opportunistic Maintenance, by 30 minutes before Balancing Gate Closure for the Trading Interval during which the Opportunistic Maintenance is proposed to commence,
 - then, for the purposes of the Market Rules, the request for approval of the Scheduled Outage or Opportunistic Maintenance is deemed to be rejected.
- 3.19.5. Where a change in power system conditions after System Management has approved a Scheduled Outage or Opportunistic Maintenance means that the Scheduled Outage or Opportunistic Maintenance is no longer approvable applying the criteria in clause 3.19.6, System Management may decide to reject the Scheduled Outage or Opportunistic Maintenance. Where System Management makes such a decision, it must inform the relevant Market Participant or Network Operator of its decision immediately.
- 3.19.6. System Management must use the following criteria when considering approval of Scheduled Outages or Opportunistic Maintenance:
 - (a) the capacity of the generation Facilities remaining in service, and System Management's reasonable forecast of the total available Demand Side Management, must be greater than the load forecast for the relevant time period;
 - (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 ensure the power system is operated within the Technical Envelope;
- (d) where a group of outages when considered together, do not meet the criteria set out in clause 3.19.6(a) to (c), 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 in accordance with clauses 3.19.4 or 3.19.5, 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 in accordance with clause 3.19.4 or 3.19.5, but were originally scheduled in System Management's outage schedule less than one month ahead; then
 - v. to Opportunistic Maintenance; and
- (e) notwithstanding the criteria set out in clause 3.19.6(a) to (d), 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.
- 3.19.7. 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.
- 3.19.8. Subject to clause 3.19.9, 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.
- 3.19.9. Compliance with clause 3.19.8 is not required if such compliance would endanger the safety of any person, damage equipment, or violate any applicable law. Where a Rule Participant cannot comply with such a decision it must inform System Management as soon as practicable.
- 3.19.10. Where a Market Participant or Network Operator has reason to believe that System Management has not followed the Market Rules or the Power System Operation Procedure in its decision to reject an outage it may report the decision to the Economic Regulation Authority as a potential breach of the Market Rules in accordance with clause 2.13.4.



- 3.19.11. An outage, including a Scheduled Outage or Opportunistic Maintenance, is a Planned Outage if it is:
 - (a) approved by System Management under clause 3.19.4; or
 - (b) deemed to be approved by System Management under clause 3.18.2A(e).

3.19.12.

(a) Where, under clause 3.19.5, System Management informs a Market Participant or Network Operator that an Outage Plan previously scheduled in System Management's outage schedule is rejected within 48 hours of the time when the outage would have commenced in accordance with the Outage Plan, the Market Participant or Network Operator may apply to AEMO for compensation.

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(d) The Market Participant or Network Operator must submit a written request for compensation to AEMO within three months of System Management's decision, including invoices and other documents demonstrating the costs referred to in clause 3.19.12(b).

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- 3.19.13. System Management must keep records of all of its outage evaluations and decisions made in accordance with this clause 3.19, together with the reasons for each outage evaluation and decision.
- 3.19.14. System Management must document the procedure it follows in conducting final approval of outages in the Power System Operation Procedure and System Management, Market Participants and Network Operators must follow that documented Market Procedure when conducting final approval of outages.
- 3.20. Outage Recall

Clause 3.20.1 has been amended to improve clarity and reflect the exemption of Self-Scheduling Outage Facilities from this clause under clause 3.18.2A(a).

- 3.20.1. Where the SWIS is in an Emergency Operating State, or High-Risk High Risk Operating State, System Management may direct a Market Participant or Network Operator that an Outage Facility be returned to return an Equipment List Facility 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.
- 3.20.2. Subject to clause 3.20.3, Market Participants and Network Operators must comply with directions from System Management under clause 3.20.1.
- 3.20.3. Rule Participants are not required to comply with directions issued by System Management under clause 3.20.1 if such compliance would endanger the safety of any person, damage equipment, or violate any applicable law. Where a Rule



Participant cannot comply with such a direction it must inform System Management as soon as practicable.

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New clause 3.21A.14 clarifies that a Market Generator may conduct a Commissioning Test for a Facility during a period in which the Facility is subject to a Planned Outage or Forced Outage.

3.21A.14. A Commissioning Test under an approved Commissioning Test Plan for an Outage Facility may cover periods in which some or all of the capacity or capability of the Outage Facility is subject to a Planned Outage or Forced Outage.[Blank]

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7.1. Data Used in the Non-Balancing and Out of Merit Dispatch Process

Clause 7.1.1 has been amended to reflect the potential for items of distribution system equipment to be included in the Equipment List.

- 7.1.1. System Management must maintain and, in accordance with section 7.6, use the following data set when issuing Dispatch Instructions to Demand Side Programmes, when issuing Dispatch Instructions to Balancing Facilities dispatched Out of Merit, and when providing Operating Instructions:
 - (a) Standing Data for Registered Facilities determined in accordance with section 2.34;
 - (b) Loss Factors determined in accordance with section 2.27;
 - (c) expected Scheduled Generator and Non-Scheduled Generator capacities by Trading Interval determined in accordance with clauses 3.17.5, 3.17.6 and 3.17.8;
 - (d) transmission network configuration and capacity by Trading Interval determined in accordance with clauses 3.17.5, 3.17.6 and 3.17.8;
 - (e) forecasts of load and non-scheduled generation by Trading Interval determined in accordance with section 7.2;
 - (f) Ancillary Service Requirements for each Trading Interval determined in accordance with clause 7.2.4;
 - (g) schedules of approved Planned Outages for generating works and transmission equipment by Trading Interval determined in accordance with section 3.19;
 - (h) transmission-Forced Outages and Consequential Outages by Trading Interval received from Network Operators in accordance with section 3.21;



- (i) Scheduled Generator, Non–Scheduled Generator and Interruptible Load Forced Outages and Consequential Outages by Trading Interval received from Market Participants in accordance with section 3.21;
- (j) [Blank]
- (k) the Non-Balancing Dispatch Merit Order;
- (I) Supplementary Capacity Contract data, if any; and
- (m) Network Control Service Contract data, if any, received from a Network Operator in accordance with clauses 5.3A.3 and 5.3A.4.

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7A.2. Balancing Submissions

- 7A.2.1. A Market Participant must at all times ensure that it has made a Balancing Submission in accordance with clause 7A.2.4 for each Trading Interval in the Balancing Horizon for each of its Balancing Facilities.
- 7A.2.2. A Market Participant may submit a subsequent Balancing Submission in accordance with clause 7A.2.4 in respect of any of its Balancing Facilities, excluding Facilities in the Balancing Portfolio, and:
 - (a) the Balancing Submission may be for one or more Trading Intervals in the Balancing Horizon; and
 - (b) the Balancing Submission must be made before Balancing Gate Closure for any Trading Interval in the submission.
- 7A.2.3. A Market Participant with a Balancing Facility that is:
 - (a) the subject of an Operating Instruction; or
 - (b) undergoing a Test that has an approved Test Plan,

must ensure that a Balancing Submission submitted under this section 7A.2 is consistent with the proposed operation of the Balancing Facility for each Trading Interval specified in the Operating Instruction or the Test Plan. The provisions of this clause 7A.2.3 do not apply to the Balancing Portfolio.

- 7A.2.4. A Balancing Submission must:
 - (a) be in the manner and form prescribed and published by AEMO;
 - (b) constitute a declaration by an Authorised Officer;
 - (c) have Balancing Price-Quantity Pair prices within the Price Caps;
 - (d) specify, for each Trading Interval covered in the Balancing Submission, whether the Balancing Facility is to use Liquid Fuel or Non-Liquid Fuel;
 - (e) specify the Ramp Rate Limit or the Portfolio Ramp Rate Limit (as applicable) for each Trading Interval covered in the Balancing Submission; and



- (f) specify the available capacity and the unavailable capacity as determined under clause 7A.2.4A, 7A.2.4B or 7A.2.4C (as applicable) for each Trading Interval covered in the Balancing Submission.
- 7A.2.4A. A Balancing Submission for a Balancing Facility that is a Scheduled Generator must specify the following details for each Trading Interval covered in the Balancing Submission:
 - (a) a ranking of Balancing Price-Quantity Pairs covering available capacity; and
 - (b) a declaration of the MW quantity that will be unavailable for dispatch, where the sum of:
 - (c) the quantities in the Balancing Price-Quantity Pairs; and
 - (d) the declared MW quantity of unavailable capacity,must be equal to the Scheduled Generator's Sent Out Capacity.

Clause 7A.2.4B has been amended to remove the proposed requirement for provision of an unavailable quantity in Balancing Submissions for Non-Scheduled Generators. The additional amendments restore the clause to its RC_2014_06 wording.

- 7A.2.4B. A Balancing Submission for a Balancing Facility that is a Non-Scheduled Generator must specify, the following details for each Trading Interval covered in the Balancing Submissions, a single Balancing Price-Quantity Pair with a MW quantity equal to the Market Participant's best estimate of the Facility's output at the end of the Trading Interval (based on an assumption, for the purposes of this clause 7A.2.4B, that the Facility will not be subject to a Dispatch Instruction that limits its output during that Trading Interval).
 - (a) the Market Participant's best estimate of the Facility's output at the end of the Trading Interval (based on an assumption, for the purposes of this clause 7A.2.4B(a), that the Facility will not be subject to a Dispatch Instruction that limits its output during that Trading Interval); and
 - (b) a declaration of the MW quantity that will be unavailable for dispatch (excluding any unavailable capacity to the extent that it relates to a temporary limitation in the intermittent energy source used by the Non-Scheduled Generator to generate electrical energy).

Clause 7A.2.4C has been amended to specify that Synergy is not required to include 'unavailable' quantities for Non-Scheduled Generators in the Balancing Portfolio in its Balancing Submissions. Note that this is a change to the wording of the clause in RC 2014 06.

- 7A.2.4C. A Balancing Submission for the Balancing Portfolio must specify the following details for each Trading Interval covered in the Balancing Submission:
 - (a) a ranking of Balancing Price-Quantity Pairs covering available capacity in the Balancing Portfolio; and



- (b) a declaration of the MW quantity of <u>capacity of Scheduled Generators in</u> the Balancing Portfolio that will be unavailable for dispatch-(excluding any unavailable capacity to the extent that it relates to a temporary limitation in the intermittent energy source used by a Non-Scheduled Generator in the Balancing Portfolio to generate electrical energy).
- 7A.2.5. For the purposes of clause 7A.2.4(b), where AEMO accepts a Balancing Submission from a Market Participant that complies with clause 7A.2.4(a), the submission will be deemed to constitute a declaration by an Authorised Officer of the Market Participant.

Clause 7A.2.6 has been amended to include references to two new clauses that relate to the update of Balancing Submissions.

- 7A.2.6. A subsequent Balancing Submission made under clauses 7A.2.2, 7A.2.9(d), 7A.2.9(e), or 7A.2.9(f), 7A.2.9B, 7A.2.9C, 7A.2.10 or 7A.3.5 in respect of the same Balancing Facility covering the same Trading Interval as an earlier Balancing Submission, overrides the earlier Balancing Submission for, and has effect in relation to, that Trading Interval.
- 7A.2.7. Where a subsequent Balancing Submission is made under clause 7A.2.6, a Market Participant must create and maintain internal records of the reasons for submitting the subsequent Balancing Submission, including details of any changed circumstances and the impacts of those circumstances that gave rise to the new Balancing Submission.
- 7A.2.8. A Market Participant (other than Synergy in relation to the Balancing Portfolio) must ensure that, for each Trading Interval in the Balancing Horizon for which Balancing Gate Closure has not occurred, its most recently submitted Balancing Submission in respect of its Balancing Facility and that Trading Interval accurately reflects:
 - (a) all information reasonably available to the Market Participant, including Balancing Forecasts published by AEMO, the information provided by AEMO under clause 7A.3.1(c) and the latest information available to it in relation to any Internal Constraint or External Constraint;
 - (b) the Market Participant's reasonable expectation of the capability of its Balancing Facilities to be dispatched in the Balancing Market; and
 - (c) the price at which the Market Participant submitting the Balancing Submission intends to have the Balancing Facility participate in the Balancing Market.

Clause 7A.2.8A has been amended to:

- reflect that the deadline for approval or rejection of Scheduled Outages is now well before
 the first Trading Interval of a Scheduled Outage enters the Balancing Horizon, so the only
 outstanding approval requests will be for Opportunistic Maintenance
- clarify that capacity undertaking a Commissioning Test under a Planned Outage can only be made available in Balancing Submissions for the Trading Intervals in which the Commissioning Test Plan indicates the Facility will be generating.
- 7A.2.8A. A Market Participant (other than Synergy in respect of the Balancing Portfolio) must, for each of its Balancing Facilities, and for each Trading Interval in the Balancing Horizon, use its best endeavours to ensure that, at all times, any of the Facility's capacity that is:
 - (a) subject to an approved Planned Outage; or
 - (b) subject to an outstanding request for approval of a Planned Outage Opportunistic Maintenance,

is declared as unavailable in the Balancing Submission for the Facility and the Trading Interval, unless the Balancing Facility is <u>undertaking expected to generate in accordance with</u> a Commissioning Test in that Trading Interval.

Clause 7A.2.9(g) has been amended to:

- require Synergy to update its Balancing Submissions to reflect the loss of capacity from a
 Forced Outage or late approval of an Opportunistic Maintenance request, but only if there
 is a credible risk that leaving the capacity in its Balancing Submissions would distort the
 operation of the Balancing Market
- reflect the proposed changes to the treatment of unavailable Non-Scheduled Generator capacity in Balancing Submissions for the Balancing Portfolio

7A.2.9. Synergy, in relation to the Balancing Portfolio:

- (a) must, subject to clauses 7A.2.9(d) to 7A.2.9(f), ensure that for each Trading Interval in the Balancing Horizon the most recently submitted Balancing Submission in respect of that Trading Interval accurately reflects:
 - all information reasonably available to Synergy, including Balancing Forecasts published by AEMO and the latest information available to Synergy in relation to any Forced Outage for a Facility in the Balancing Portfolio;
 - ii. subject to clause 7A.2.9A(b), Synergy's reasonable expectation of the capability of its Balancing Portfolio to be dispatched in the Balancing Market for that Trading Interval; and
 - iii. the price at which Synergy intends to have the Balancing Portfolio participate in the Balancing Market;
- (b) must indicate in a manner and form prescribed by AEMO:



- i. which of the Balancing Price-Quantity Pairs that it has priced at the Minimum STEM Price are for Facilities that are to provide LFAS;
- ii. which Facilities are likely to provide LFAS; and
- iii. for each completed Trading Interval, which Facilities actually provided the LFAS in the Trading Interval;

(c) must:

- i. ensure that quantities in the Balancing Price-Quantity Pairs in its Balancing Submissions that are required for the provision of Ancillary Services, other than LFAS, are priced at the Price Caps;
- ii. advise AEMO in a manner and form prescribed by AEMO, the Facilities which are likely to provide the quantities specified in clause 7A.2.9(c)(i); and
- iii. for each completed Trading Interval, advise AEMO which Facilities actually provided the Ancillary Services referred to in clause 7A.2.9(c)(i) in the Trading Interval;
- (d) may submit a new, updated Balancing Submission in relation to any Trading Interval in the Balancing Horizon for which Balancing Gate Closure is more than two hours in the future:
 - i. by submitting its updated Balancing Submission to AEMO immediately before 1:00 PM; or
 - ii. otherwise by submitting its updated Balancing Submission to AEMO within one hour after LFAS Gate Closure;
- (e) may submit a new, updated Balancing Submission in relation to any Trading Interval in the Balancing Horizon for which Balancing Gate Closure is more than two hours in the future if a Facility in the Balancing Portfolio has experienced a Forced Outage since the last Balancing Submission;
- (f) may after the time specified in clause 7A.2.9(d), submit a new, updated Balancing Submission to reflect the impact of a Forced Outage which Synergy expects will cause a Facility to run on Liquid Fuel, where the Facility would not have run on Liquid Fuel but for the Forced Outage, in order to meet Synergy's Balancing Market obligations in relation to the Balancing Portfolio under this Chapter 7A; and
- (g) must, if System Management approves a Planned Outage for a Facility in the Balancing Portfolio and a Trading Interval after the latest time specified in clause 7A.2.9(d), update its Balancing Submission for the Trading Interval as soon as practicable, but before Balancing Gate Closure for the Trading Interval, to:
 - i. make the capacity subject to the outage unavailable; and
 - ii. remove or reduce the quantity of the highest price Balancing Price-Quantity Pair or Balancing Price-Quantity Pairs (excluding any Balancing Price-Quantity Pairs that are required to be offered at the



Price Caps under clause 7A.2.9(c)) to remove the capacity subject to the outage from its Balancing Price-Quantity Pairs.

(g) must, as soon as it becomes aware that:

i. either:

- a Facility in the Balancing Portfolio has experienced a Forced Outage; or
- System Management has approved a request for
 Opportunistic Maintenance for a Facility in the Balancing Portfolio; and
- ii. the outage will reduce the available capacity of the Balancing

 Portfolio in a Trading Interval in the Balancing Horizon from the
 quantity reported as available in the current Balancing Submission for
 that Trading Interval; and
- iii. there is a credible risk that representation of the relevant capacity as available in the Balancing Submission might, in the circumstances:
 - affect any expected EOI Quantity provided to another Market
 Participant for the Trading Interval under clause 7A.3.1(c); or
 - cause System Management to dispatch Balancing Facilities
 Out of Merit under clauses 7.6.1C(b) or 7.6.1C(c),

submit a new, updated Balancing Submission for the Trading Interval to:

- iv. make any relevant Scheduled Generator capacity subject to the outage unavailable; and
- v. unless otherwise permitted under clauses 7A.2.9(d) to 7A.2.9(f),
 remove or reduce the quantity of the highest price Balancing PriceQuantity Pair or Balancing Price-Quantity Pairs (excluding any
 Balancing Price-Quantity Pairs that are required to be offered at the
 Price Caps under clause 7A.2.9(c)) to remove the capacity subject to
 the outage from its Balancing Price-Quantity Pairs.

Clause 7A.2.9A has been amended to:

- restrict the obligation to Scheduled Generators, to reflect that unavailable quantities for Non-Scheduled Generators are not required in Balancing Portfolio Balancing Submissions
- clarify that capacity undertaking a Commissioning Test under a Planned Outage can only be made available in Balancing Submissions for Trading Intervals in which the Commissioning Test Plan indicates the Facility will be generating
- restrict the obligation to Opportunistic Maintenance, to reflect that the deadline for approval or rejection of Scheduled Outages is now well before the time the first Trading Interval of a Scheduled Outage will enter the Balancing Horizon
- 7A.2.9A. Synergy must, to the extent it is able to update its Balancing Submissions subject to clauses 7A.2.9(d)-(g) to 7A.2.9(g) (as applicable), for each Facility Scheduled



<u>Generator</u> in the Balancing Portfolio, and for each Trading Interval in the Balancing Horizon, use its best endeavours to ensure that, at all times:

- (a) any of the Facility's Scheduled Generator's capacity that is subject to an approved Planned Outage is declared as unavailable in the Balancing Submission for the Balancing Portfolio and that Trading Interval, except where that Facility Scheduled Generator is subject to expected to generate in accordance with a Commissioning Test; and
- (b) any of the Facility's Scheduled Generator's capacity that is subject to an outstanding request for approval of a Planned Outage Opportunistic Maintenance is declared as available in the Balancing Submission for the Balancing Portfolio and that Trading Interval.

Clause 7A.2.9B has been amended to account for situations where a Balancing Facility that is not synchronised when its Planned Outage is rejected could not be synchronised by the start of the first Trading Interval for which Balancing Gate Closure has not yet occurred.

- 7A.2.9B. If System Management rejects a previously approved Planned Outage of a Balancing Facility (or a Facility in the Balancing Portfolio) under clause 3.19.5, then the relevant Market Participant must, as soon as practicable, update its Balancing Submission for any relevant Trading Intervals in the Balancing Horizon for which:

 Balancing Gate Closure has not yet occurred, to reflect that the capacity will not be subject to a Planned Outage.
 - (a) the Market Participant can make the relevant capacity available for dispatch, taking into account any relevant Equipment Limits; and
 - (b) Balancing Gate Closure has not yet occurred,
 to reflect that the capacity will not be subject to a Planned Outage in those Trading Intervals.
- 7A.2.9C. If System Management directs a Market Participant to return a Balancing Facility or a Facility in the Balancing Portfolio from a Planned Outage in accordance with an the relevant Outage Contingency Plan under clause 3.20.1, then the Market Participant must, as soon as practicable, update its Balancing Submission for any relevant Trading Intervals in the Balancing Horizon for which Balancing Gate Closure has not yet occurred, to reflect the impact of System Management's direction on the proposed end time of the Planned Outage.
- 7A.2.10. A Market Participant (other than Synergy in relation to the Balancing Portfolio) as soon as it becomes aware that a Balancing Submission for a Trading Interval for which Balancing Gate Closure has occurred is inaccurate:
 - (a) if the inaccuracy is due to an Internal Constraint, must make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the available Sent Out Capacity of that Facility and the Ramp Rate Limit is accurate but no prices are altered, in respect of that Trading Interval as soon as reasonably practicable;



- (b) if the inaccuracy is due to an External Constraint, may make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the available Sent Out Capacity of that Facility and the Ramp Rate Limit is accurate but no prices are altered, in respect of that Trading Interval, as soon as reasonably practicable;
- (c) if the inaccuracy is due to the Market Participant receiving an Operating Instruction, may make a new, accurate Balancing Submission that reflects the Operating Instruction; or
- (d) if the inaccuracy is due to a variation of the availability of the intermittent energy source used by a Non-Scheduled Generator, may make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the Market Participant's best estimate of the Facility's output at the end of the Trading Interval and the Ramp Rate Limit is accurate but the price is not altered, in respect of that Trading Interval.
- 7A.2.10A. A Market Participant (other than Synergy in relation to the Balancing Portfolio) must not submit a new, updated Balancing Submission in respect of a Trading Interval for which Balancing Gate Closure has occurred except in accordance with clause 7A.2.10.
- 7A.2.11. Where a Market Participant has submitted a Balancing Submission in accordance with clauses 7A.2.10(a) or 7A.2.10(b) after Balancing Gate Closure, the Market Participant must, as soon as reasonably practicable, provide AEMO with written details of the nature of the Internal Constraint or External Constraint, when it occurred and its duration.
- 7A.2.12. Where Synergy has submitted an updated Balancing Submission for the Balancing Portfolio in accordance with clauses 7A.2.9(e) or 7A.2.9(f) because of a Forced Outage of one of the Facilities in the Balancing Portfolio after the time specified in the applicable clause it must, as soon as reasonably practicable, provide AEMO with written details of:
 - (a) the nature of the Forced Outage;
 - (b) when the Forced Outage occurred;
 - (c) the duration of the Forced Outage; and
 - (d) information substantiating the commercial impact, if any, of the Forced Outage.
- 7A.2.13. A Market Participant must:
 - (a) make a Balancing Submission under this section 7A.2 in good faith;
 - (b) not act in a manner that:
 - i. is intended to lead: or
 - ii. the Market Participant should have reasonably known is likely to lead,



- to another Rule Participant being misled or deceived as to the existence or non-existence of a material fact relating to the Balancing Market; and
- (c) not include information in a Balancing Submission relating to prices for a purpose of influencing the determination of the Constrained Off Compensation Price, the Constrained Off Quantity which the Facility may provide, the Constrained On Compensation Price or the Constrained On Quantity which the Facility may provide.

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7A.2A. Unavailable capacity Capacity in a Balancing Submission

Clauses 7A.2A.1 and 7A.2A.2 have been amended to:

- remove the obligation for a Market Generator to report an outage just because it chooses not to offer capacity for which it does not hold Capacity Credits into the Balancing Market (note this also accounts for temperature-related de-rating up to 41 degrees Celsius)
- account for capacity that is declared as unavailable because the maximum site temperature was reasonably expected to exceed 41 degrees Celsius
- account correctly for capacity that is subject to an approved Commissioning Test Plan
- base the tests on the situation during the Trading Interval rather than at the relevant gate closure time
- make the clause also subject to new clause 7A.2A.4
- 7A.2A.1. Subject to clauses 7A.2A.3 and 7A.2A.4, a Market Participant (other than Synergy in respect of the Balancing Portfolio) must, as soon as practicable after Balancing Gate Closure for each Trading Interval, for each of its Balancing Facilities that is an Outage Facility, ensure that it has notified System Management of a Forced Outage or Consequential Outage for that relates to any capacity for which the Market Participant holds Capacity Credits declared unavailable in the Facility's Balancing Submission that:
 - (a) was declared unavailable in the Facility's Balancing Submission for that Trading Interval;
 - (a)(b) was not subject to an approved Planned Outage or Commissioning Test Plan in that at Balancing Gate Closure for the Trading Interval; and
 - (b)(c) is not attributable to a difference between the expected temperature at the site during the Trading Interval and the temperature at which the Sent Out Capacity for the Facility was determined was not declared unavailable in the Facility's Balancing Submission because the Market Participant reasonably expected that its Reserve Capacity Obligations for the Trading Interval would be reduced because the maximum site temperature for the applicable Trading Day would exceed 41 degrees Celsius.

- 7A.2A.2. Subject to clauses 7A.2A.3 and 7A.2A.4, Synergy must, as soon as practicable after the latest time specified in clause 7A.2.9(d) for a each Trading Interval, for each Facility in the Balancing Portfolio that is an Outage Facility, ensure that it has notified System Management of a Forced Outage or Consequential Outage-for that relates to any capacity for which Synergy holds Capacity Credits-declared unavailable in the Facility's Balancing Submission that:
 - (a) was declared unavailable in the Balancing Portfolio's Balancing Submission for that Trading Interval;
 - (a)(b) was not subject to an approved Planned Outage, or Commissioning Test Plan in that at that time for the Trading Interval; and
 - (b)(c) is not attributable to a difference between the expected temperature at the site during the Trading Interval and the temperature at which the Sent Out Capacity for the Facility was determined was not declared unavailable in the Balancing Portfolio's Balancing Submission because Synergy reasonably expected that its Reserve Capacity Obligations for the Trading Interval would be reduced because the maximum site temperature for the relevant Trading Day would exceed 41 degrees Celsius.

Clause 7A.2A.3 has been amended to:

- account for situations where a Balancing Facility that is not synchronised at the time its Planned Outage is rejected could not be synchronised by the start of the first Trading Interval for which Balancing Gate Closure is not at least 30 minutes in the future
- base the exemption on the Balancing Gate Closure time for a Trading Interval for all Balancing Facilities, including those in the Balancing Portfolio, to reflect the obligation under clause 7A.2.9B.
- 7A.2A.3. Clauses 7A.2A.1 and 7A.2A.2 do not apply in respect of a Trading Interval if to any capacity that was subject to a previously approved Planned Outage for the Trading Interval that was rejected by System Management under clause 3.19.5 less than 30 minutes before:
 - (a) Balancing Gate Closure, for a Facility that is not in the Balancing Portfolio; or
 - (b) the latest time specified in clause 7A.2.9(d), for a Facility in the Balancing Portfolio.
 - (a) the relevant capacity was previously subject to an approved Planned Outage for the Trading Interval; and
 - (b) System Management notified the Market Participant of the rejection of the Planned Outage under clause 3.19.5:
 - less than 30 minutes before Balancing Gate Closure for the Trading
 Interval; or
 - ii. at a time when the Facility was not synchronised and could not be synchronised by the start of the Trading Interval given the Facility's relevant Equipment Limits.



New clause 7A.2A.4 exempts a Market Participant from the obligations under clause 7A.2A.1 and 7A.2A.2 where the relevant capacity is subject to the late cancellation/rejection of a Commissioning Test Plan or Consequential Outage.

7A.2A.4. Clauses 7A.2A.1 and 7A.2A.2 do not apply in respect of a Trading Interval if:

- (a) the relevant capacity was previously subject to an approved Consequential

 Outage or Commissioning Test Plan for the Trading Interval; and
- (b) System Management notified the Market Participant that the capacity was no longer subject to the Consequential Outage or Commissioning Test Plan for the Trading Interval:
 - i. less than 30 minutes before:
 - Balancing Gate Closure for the Trading Interval, for a Facility that is not in the Balancing Portfolio; or
 - the latest time specified in clause 7A.2.9(d) for the Trading Interval, for a Facility in the Balancing Portfolio; or
 - ii. at a time when the Facility was not synchronised and could not be synchronised by the start of the Trading Interval given the Facility's relevant Equipment Limits.

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Glossary

Equipment List: Means the list maintained by System Management under clause 3.18.2(a).

Equipment List Facility: Means a Facility or item of equipment that is included on the Equipment List.

Outage Facility: Means an Equipment List Facility or a Small-Self-Scheduling Outage Facility.

The definition of Scheduled Outage has been amended to include the meaning of the term instead of a reference to clause 3.19.1.

Scheduled Outages: Has the meaning given in clause 3.19.1. Means an outage that has an Outage Plan that is included in System Management's outage schedule.

The proposed defined term Small Outage Facility has been renamed Self-Scheduling Outage Facility.

Small Self-Scheduling Outage Facility: Has the meaning given in clause 3.18.2A(a).

Appendix F. Planned Outage Terminology

This appendix discusses the Planned Outage terminology used in the Market Rules. The Rule Change Panel has not proposed any material changes to the terminology in the proposed Amending Rules for this Rule Change Proposal to avoid incurring unnecessary implementation costs.

The Market Rules distinguish between an actual outage and a request or plan for that outage. The Rule Change Panel notes that in the Market Rules, an outage is a type of event, something that occurs over a certain period and involves a reduction in the available capacity or capability of an Outage Facility. Planned Outages, Scheduled Outages and Opportunistic Maintenance are all types of outages.

An Outage Plan is a plan for a Scheduled Outage. By submitting an Outage Plan to System Management, a Rule Participant is making a request for that Outage Plan to be scheduled in System Management's outage schedule. The Market Rules refer to an Outage Plan being scheduled in the outage schedule, but also use the practical and easily understandable shorthand expression that the outage is in the outage schedule (in the same way as one might say that a particular meeting is in a schedule, rather than the more laborious "a plan for the meeting is recorded in the schedule"). Once the Outage Plan is in the outage schedule, the outage (not the Outage Plan) becomes a Scheduled Outage. The Outage Plan does not become a Scheduled Outage, but remains an Outage Plan, albeit an accepted or scheduled one.

The Rule Participant is required to "request that System Management approve the Scheduled Outage proceeding". While some clauses refer to System Management approving or rejecting the request for approval and others refer to approving or rejecting the outage, the Rule Change Panel does not consider this to be a problem as the meaning is the same in both cases (i.e. approving the request means approving the outage proceeding).

Once approved, a Scheduled Outage is officially a Planned Outage, but does not cease to be a Scheduled Outage.

For Opportunistic Maintenance, there is no defined term for the request – it is just a request for Opportunistic Maintenance, even though it contains the same information as an Outage Plan. As for Scheduled Outages, the Market Rules refer to approving the request and approving the outage interchangeably, but the meaning is the same in both cases. Once approved, the outage is officially a Planned Outage, but is also Opportunistic Maintenance.

If a request for approval of a Scheduled Outage or Opportunistic Maintenance is rejected, then the proposed outage might proceed as a Forced Outage but might also not proceed at all.

The Market Rules do not explicitly classify the Planned Outages of Self-Scheduling Outage Facilities as Scheduled Outages or Opportunistic Maintenance, and do not refer to any of these outages being scheduled in System Management's outage schedule. This is consistent with the fact that these outages are automatically deemed to be approved and are not subject to evaluation or prioritisation by System Management.

When a Rule Participant submits an Outage Plan, requests approval of a Scheduled Outage or Opportunistic Maintenance, or notifies System Management of an outage of a Self-Scheduling Outage Facility under clause 3.18.2A(b); it is clearly proposing that the outage it is contemplating will occur in the future and be a Planned Outage. Therefore, the Rule Change Panel does not consider that there is anything incorrect or misleading about using the term 'proposed Planned Outage' to describe such outages.



While the Rule Change Panel acknowledges that strictly it is tautological to refer to an 'approved' Planned Outage (because the outage must be approved to qualify as a Planned Outage), it has retained the expression in those clauses where it clarifies the meaning of the clause by emphasising the point that the outage has been approved by System Management.