



INDEPENDENT  
MARKET  
OPERATOR

## Rule Change Notice

### Administrative Improvements to the Outage Process (RC\_2014\_03)

This notice is given under clause 2.5.7 of the Wholesale Electricity Market Rules (Market Rules).

**Submitter:** Kate Ryan, IMO

**Date submitted:** 27 November 2014

#### The proposal

The IMO has recently completed a review of the Consequential Outage process and as a part of this process consulted with System Management to identify whether a more efficient process is possible. As a result of this review, the IMO proposes to remove the requirement for a Market Participant to provide a notice of the Consequential Outage signed by an 'authorised officer' and instead allow Market Participants to log Consequential Outages directly.

The IMO also proposes to make other administrative amendments to the Outage process, including:

- introducing the ability for Market Participants to log Outages in advance, thereby improving the transparency of Facility availability and price signals to other Market Participants;
- requiring the IMO to provide the megawatt quantity of Capacity Credits assigned to a Facility to System Management for its determination of the quantity of an Outage, instead of its Reserve Capacity Obligation Quantity (RCOQ), as the RCOQ accounts for factors such as staffing levels, Outage quantities and temperature which are impractical to determine at the time this information is provided;
- clarifying the obligations for Scheduled and Non-Scheduled Generators with respect to the quantity of the Outage that is required to be logged, to the extent practicable;
- requiring System Management to provide unadjusted Outage quantities (at 15 degrees Celsius) to the IMO when it provides the temperature adjusted Outage quantities (at 41 degrees Celsius), for use in the certification of Reserve Capacity; and
- clarifying that the obligation for Market Participants to provide the 'full and final details' to System Management with respect to an Outage is explicitly related to a Trading Day on which the Outage occurred as currently, these details must be provided 15 days after the Trading Day on which the Outage commenced which is impractical for Outages that extend over long periods.

The IMO has also taken the opportunity to make minor drafting improvements to a number of clauses related to the Outage process, to improve the integrity of the Market Rules.

Appendix 1 contains the Rule Change Proposal and gives complete information about:

- the proposed amendments to the Market Rules;
- relevant references to clauses of the Market Rules and any proposed specific amendments to those clauses; and
- the submitter's description of how the proposed amendments would allow the Market Rules to better address the Wholesale Market Objectives.

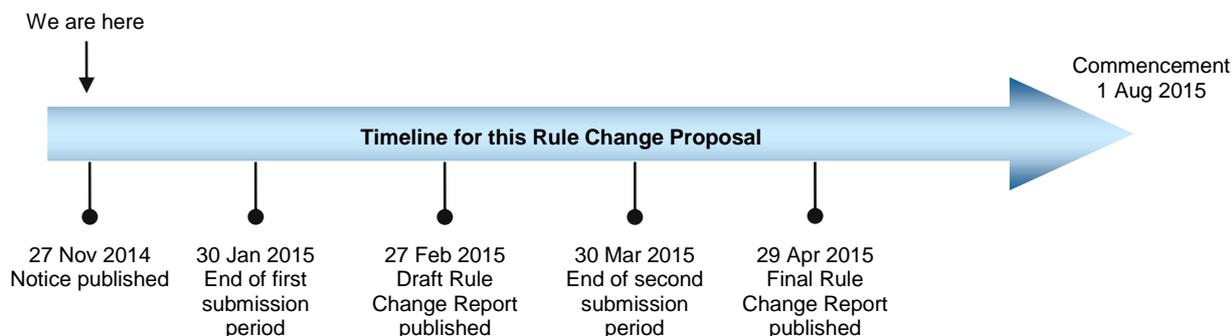
## Decision to progress the Rule Change Proposal

The IMO has decided to proceed with the proposal on the basis that section 4 of the Rule Change Proposal indicates that the proposed amendments would better achieve the Wholesale Market Objectives. In particular, the proposed streamlining of the Consequential Outage process and clarification of the obligations of the parties involved in the Outage process are expected to allow the Market Rules to better achieve Wholesale Market Objectives (a) and (d).

On this basis, the IMO considers that Rule Participants should be given an opportunity to provide submissions on the proposal.

## Timeline

The projected timelines for processing this proposal are:



Please note that the first submission period has been extended beyond the usual 30 Business Days, by 12 Business Days, to account for the Christmas period. All other dates have been adjusted accordingly.

## Call for submissions

The IMO invites interested stakeholders to make submissions on this Rule Change Proposal. The submission period is 42 Business Days from the Rule Change Notice publication date. Submissions must be delivered to the IMO by **5:00 PM on Friday 30 January 2015**.

The IMO prefers to receive submissions by email (using the submission form available on the Market Web Site: <http://www.imowa.com.au/rule-changes>) to [market.development@imowa.com.au](mailto:market.development@imowa.com.au).

Submissions may also be sent to the IMO by fax or post, addressed to:

**Independent Market Operator**

Attn: Group Manager, Development and Capacity

PO Box 7096

Cloisters Square, PERTH, WA 6850

Fax: (08) 9254 4399



INDEPENDENT  
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## Wholesale Electricity Market Rule Change Proposal

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**Rule Change Proposal ID:** RC\_2014\_03  
**Date received:** 27 November 2014

**Change requested by:**

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<b>Address:</b>	Level 17, 197 St Georges Terrace, Perth 6000
<b>Date submitted:</b>	27 November 2014
<b>Urgency:</b>	Medium
<b>Rule Change Proposal title:</b>	Administrative Improvements to the Outage Process
<b>Clause(s) affected:</b>	Clauses 3.18.4A, 3.21.1, 3.21.2, 3.21.2A (new), 3.21.2B (new), 3.21.3, 3.21.4, 3.21.4A (new), 3.21.4B (new), 3.21.5, 3.21.6, 3.21.7, 3.21.8, 3.21.9, 3.21.10, 3.21.11, 3.21.12, 4.25.3A, 7.10.2, 7.13.1A, 7.13.1G and the Glossary.

### Introduction

Clause 2.5.1 of the Wholesale Electricity Market Rules (Market Rules) provides that any person (including the IMO) may make a Rule Change Proposal by completing a Rule Change Proposal form that must be submitted to the IMO.

This Rule Change Proposal can be posted, faxed or emailed to:

**Independent Market Operator**

Attn: Group Manager, Development and Capacity  
PO Box 7096  
Cloisters Square, Perth, WA 6850  
Fax: (08) 9254 4339  
Email: [market.development@imowa.com.au](mailto:market.development@imowa.com.au)

The IMO will assess the proposal and, within five Business Days of receiving this Rule Change Proposal form, will notify you whether the Rule Change Proposal will be further progressed.

In order for the proposal to be progressed, all fields below must be completed and the change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the Wholesale Market Objectives.

The objectives of the market 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.

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## Details of the Proposed Rule Change

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### 1. Describe the concern with the existing Market Rules that is to be addressed by the proposed Market Rule change:

#### *Amendments to the Consequential Outage process*

In 2010 Alinta Energy submitted the Rule Change Proposal: Consequential Outage – Relief from Capacity Refund and Unauthorised Deviation Penalties (RC\_2010\_23<sup>1</sup>) to prevent the situation where a Market Participant who had experienced a Consequential Outage would be liable for Capacity Cost Refunds and unauthorised deviation penalties.

During the rule change process for RC\_2010\_23, System Management noted that, under Alinta Energy's proposed amendments, there was the potential for Market Participants to 'game' the arrangements by either claiming a Forced Outage as a Consequential Outage, or else exaggerating the impact of the Consequential Outage on the Facility's ability to meet its obligations. This was because in some cases establishing a link of causality between events or circumstances on the South West interconnected system (SWIS) and a Market Participant's submissions to System Management in relation to a particular Outage event may have been difficult or in some cases impossible.

System Management suggested several additional clauses to strengthen governance with respect to the Consequential Outage process and establish increased accountability regarding a Market Participant's Outage submissions to System Management. The additional clauses were incorporated into the Rule Change Proposal and have resulted in the following Consequential Outage process:

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<sup>1</sup> Available at: [www.imowa.com.au/RC\\_2010\\_23](http://www.imowa.com.au/RC_2010_23).

1. a Market Participant that has experienced a Consequential Outage is required to log a Forced Outage in the first instance;
2. within 15 calendar days following the Trading Day on which the Consequential Outage commenced, if the relevant Market Participant wishes to have its Forced Outage converted to a Consequential Outage it must provide a notice signed by an Authorised Officer (an 'authorised notice') declaring that a Consequential Outage has occurred and providing relevant details (to the best of its knowledge) of the events which resulted in the Consequential Outage;
3. System Management must accept the information provided by the Market Participant unless it is aware of information to the contrary, and convert the Forced Outage to a Consequential Outage; and
4. System Management must retain the authorised notices which it receives and provide these to the IMO upon request, and in any case, at least every six months.

In the Final Rule Change Report for RC\_2010\_23, the IMO proposed to conduct a review of the Consequential Outage notifications received, six months after the commencement of the Rule Change Proposal, with the assistance of System Management. The review was also to consider whether additional amendments to the Market Rules were required (e.g. with respect to introducing periodic Consequential Outage reviews or changing governance arrangements).

The IMO has recently completed this review, and as a part of this process consulted with System Management to identify whether a more efficient Consequential Outage process is possible. During this consultation, it was identified that, where a Market Participant provides the information required in an outage notification specified in existing clause 3.21.4 of the Market Rules (proposed to be moved to clause 3.21.4B), System Management is able to determine whether, and to what extent, a Consequential Outage has occurred without requiring an authorised notice to be provided by the affected Market Participant.

The IMO therefore proposes to remove the requirement for Market Participants to provide an authorised notice to System Management and to allow Market Participants to request Consequential Outages directly through the System Management Market Information Technology System (SMMITS) (rather than initially logging a Forced Outage which System Management later converts to a Consequential Outage). The IMO proposes to amend clauses 3.21.2, 3.21.8, 3.21.10 and 3.21.11 of the Market Rules, and introduce new clauses 3.21.2A and 3.21.2B into the Market Rules, to enable the following streamlined Consequential Outage process:

1. a Market Participant requests a Consequential Outage directly through SMMITS; and
2. System Management approves or rejects the Consequential Outage in SMMITS on the basis of the information it has available to it.

In addition, the IMO proposes to amend clause 3.21.9 of the Market Rules to allow System Management to accept information provided by a Network Operator to consider when determining whether an outage is a Consequential Outage.

The IMO also proposes to amend clause 3.21.9 of the Market Rules, to remove two existing cross-references, and add three new cross-references, to ensure consistency with the changes proposed to the Consequential Outage process.

The IMO proposes to introduce the new clause 3.21.2A of the Market Rules which requires System Management to determine, and advise the relevant Market Participant or Network Operator as soon as practicable, whether an outage notified under clause 3.21.4 or new

clause 3.21.4A of the Market Rules is a Consequential Outage. The IMO has also amended the cross-reference in clause 7.13.1G(c)(iii) of the Market Rules to reflect the relocation (from clause 3.21.2 to 3.21.2A) of the IMO determination of a Consequential Outage.

In the proposed new clause 3.21.2B of the Market Rules the IMO proposes to allow System Management to revise an earlier Consequential Outage determination if the earlier determination was based on incorrect or superseded information, except where the determination applies to an outage that is deemed to be a Consequential Outage (under the proposed amendments to clause 3.21.2(c) of the Market Rules) on the basis of the relevant Rule Participant's reasonable expectation, 30 minutes before Balancing Gate Closure, that the outage would occur.

### ***Logging of an Outage in advance***

The Market Rules currently do not allow a Market Participant or Network Operator to log a Forced Outage or Consequential Outage in advance of the outage occurring. However, the IMO considers that the ability for a Market Participant to log Forced Outages and Consequential Outages in advance will improve the transparency of Facility availability and thereby improve the price signals to other Market Participants.

The IMO proposes to amend clauses 3.21.1, 3.21.2 and 3.21.3 of the Market Rules and introduce new clauses 3.21.2A and 3.21.4A into the Market Rules which will enable, but not require, a Market Participant or Network Operator to log a Consequential Outage as soon as it receives notification (from a Network Operator or other Rule Participant) of an outage which will de-rate its Facility. The proposed amendments will also enable System Management, where appropriate, to approve such outages in advance based on its own determination that the Consequential Outage will occur, under amended clause 3.21.2(b) of the Market Rules.

The proposed amendments to include the new clause 3.21.2(c) into the Market Rules will allow an outage which has not commenced, and which hasn't being determined by System Management to be a Consequential Outage, to be deemed to be a Consequential Outage if the affected Rule Participant could reasonably expect, based on the information that was available to it 30 minutes before Balancing Gate Closure, that its Facility would be de-rated by a Consequential Outage. This clause prevents a Market Participant or Network Operator from being subject to a Forced Outage if the Consequential Outage does not occur, provided that the Market Participant or Network Operator's expectation that a Consequential Outage would occur, was considered reasonable by System Management.

The IMO also proposes to amend the notification requirements for a Rule Participant subject to a Forced Outage or Consequential Outage, currently contained in clause 3.21.4 of the Market Rules (proposed to be moved to clause 3.21.4B of the Market Rules), to include any other information System Management requests in order to verify the details of that outage.

Consequently, the IMO has amended the cross-reference in clause 7.13.1G(b) of the Market Rules to reflect the relocation of the information required in a Forced Outage or Consequential Outage notification.

The IMO also proposes to amended clause 4.25.3A of the Market Rules to include a cross-reference to the new clause 3.21.4A to ensure that a Facility subject to a Forced Outage or Consequential Outage notified under new clause 3.21.4A should not be subject to a Reserve Capacity Test.

Similarly, the IMO has amended clause 7.10.2(c)(i) of the Market Rules to include a cross-reference to the new clause 3.21.4A. This will ensure that a Market Participant, which

has notified System Management of an outage in accordance with clause 3.21.4A, and to which clause 7.10.2(c)(ii) of the Market Rules applies, is not required to comply with the most recently issued Dispatch Instruction, Operating Instruction or Dispatch Order under clause 7.10.1 of the Market Rules.

### ***Provision of quantities by the IMO to System Management for the calculation of Outages***

Clause 3.21.6(e) of the Market Rules requires the IMO to provide System Management with the Reserve Capacity Obligation Quantity (RCOQ) for each Facility as currently applicable. This is to be used in System Management's calculation of the Outage quantity for Scheduled Generators.

However, practically, the IMO cannot determine in advance of a Trading Interval each Facility's RCOQ. For example, the RCOQ must account for factors such as staffing levels, Outage quantities and temperature which may restrict the ability of the Facility to provide energy at any particular point in time. While it is not practical for either the Market Participant to provide the IMO with this type of information, or the IMO to be considering it with respect to the capability of the Facility, it is also not necessary.

To date, the IMO has provided System Management with each Facility's megawatt value of Capacity Credits rather than its RCOQ. While there is a difference between the two values, it is not expected to result in significantly different outcomes for the purpose of calculating a Scheduled Generator's Outage values or its Certified Reserve Capacity.

The IMO therefore proposes to amend clause 3.21.6 of the Market Rules to align it with current practice, by requiring the IMO to provide System Management with each Facility's megawatt value of Capacity Credits, rather than its RCOQ. In addition, the IMO proposes to amend clause 3.21.6 of the Market Rules to clarify that these calculations apply only to Scheduled Generators.

This amendment will align the Market Rules to current operational practices and therefore will not impact market outcomes.

### ***Quantity of de-rating for Scheduled and Non-Scheduled Generators***

Currently, clause 3.21.4 of the Market Rules (proposed to be relocated to new clause 3.21.4B) outlines the information that must be provided to System Management with respect to the notification of a Forced Outage or Consequential Outage. This includes the time the Outage commenced, an estimate of the time the Outage is expected to end, the cause of the Outage, the Facility or items affected and the expected quantity of the Outage.

However, currently clause 3.21.4(e) of the Market Rules can only be applied to Scheduled Generators, as the quantity of an Outage to be calculated in accordance with clause 3.21.5 of the Market Rules, which requires the quantity to be determined with respect to a Facility's maximum capacity as adjusted using the Standing Data for temperature dependence in Appendix 1(b)(iv) of the Market Rules. This section of Appendix 1 outlines the Standing Data required for Scheduled Generators only, resulting in ambiguity about how to determine the quantity of any reduction in capacity of a Non-Scheduled Generator for the purposes of Outage calculations.

Similarly, clause 3.21.6 of the Market Rules provides the process by which System Management determines the de-rating of a Facility's output as the result of an Outage. Under the current process:

- Market Participants enter an outage quantity on a generated basis at 15 degrees Celsius;
- System Management converts the quantity to a sent out basis at 15 and 41 degrees Celsius and adjusts it based on the Facility's RCOQ (to be changed to Capacity Credits);
- System Management calculates the total megawatt quantity of Forced, Planned and Consequential Outages for each Facility under clauses 3.21.6(b) to (d) of the Market Rules; and
- System Management provides the Outage values to the IMO as required under clauses 7.3.4 and 7.13.1A(b) of the Market Rules.

The application of clause 3.21.6 of the Market Rules to a Non-Scheduled Generator is currently inappropriate because Non-Scheduled Generators have an RCOQ of zero. This produces negative values, which, under clause 3.21.6(b) to (d) of the Market Rules would result in Outage quantities of zero by way of System Management taking the greater of the calculated value and zero. Analogous results would continue to be calculated under the proposed approach of moving to Capacity Credits, as Non-Scheduled Generators are usually certified for significantly less Capacity Credits than their maximum capacity, which produces a zero result where the MW reduction in the output of a Facility is greater than its Capacity Credits.

The IMO therefore proposes to restrict the application of clause 3.21.6 of the Market Rules to only apply to Scheduled Generators and to amend clause 3.21.5 of the Market Rules to clarify how this currently applies to Non-Scheduled Generators. The proposed Amending Rules require the quantity of the reduction in capacity of a Non-Scheduled Generator to be calculated by reference to its Sent Out Capacity. This is also reflected in the proposed amendment to the definition of 'Available Capacity' in the Glossary of the Market Rules.

This amendment will align the Market Rules to current operational practices and therefore will not impact market outcomes. These amendments will ensure that meaningful Outage quantities will be calculated under this clause and provided to the IMO under clauses 7.3.4 and 7.13.1A of the Market Rules, which are used for the purposes of certification and for providing transparency to the market about the availability of Non-Scheduled Generators.

The IMO has also taken the opportunity to propose further changes to clause 3.21.5 of the Market Rules to provide clarity on the Outage quantity required to be logged, by specifying that the quantity is the average reduction in capacity over the Trading Interval. This is not a new requirement but its inclusion will avoid any potential confusion and ensure that all Market Participants provide consistent Outage quantities.

The IMO also proposes additional amendments to clause 3.21.6(a) of the Market Rules to clarify the process which occurs when Market Participants enter data into SMMITS.

### ***Provision of Outage quantities by System Management to the IMO for certification***

Currently, System Management provides Outage quantities for each Facility for each Trading Interval to the IMO as temperature adjusted values (at 41 degrees Celsius) under clause 7.13.1A of the Market Rules.

To ensure that the IMO can consider a Facility's availability when certifying Reserve Capacity under clause 4.11.1 of the Market Rules, the IMO also requires Outage quantities to be provided on a sent out basis at 15 degrees Celsius for each Trading Interval.

The IMO proposes to amend clause 7.13.1A of the Market Rules to require System Management to provide the IMO with the megawatt quantity of the reduction in a Facility's capacity for each Facility for each Trading Interval on a sent out basis at 15 degrees Celsius, for both Scheduled and Non-Scheduled Generators, together with the temperature adjusted values currently provided for Scheduled Generators.

The IMO will work with System Management to review section 8.1 of the Power System Operation Procedure (PSOP): Dispatch to assess whether further clarity on the calculation of the expected quantity of an Outage for a Non-Scheduled Generator can be provided<sup>2</sup>.

### ***Clarification of the timeframes for providing Outage information to System Management***

Clause 3.21.7 of the Market Rules provides the timeframe under which Market Participants or Network Operators must provide 'full and final details' of the relevant Planned, Forced or Consequential Outage to System Management. However, for an Outage that spans multiple Trading Days, based on the current drafting, it is unclear on which Trading Day the 15 day timeframe should start.

Further, the obligation to provide 'full and final details' of an Outage no later than 15 calendar days following the Trading Day on which the Outage commenced is impractical as this information may not yet exist for Outages that extend for more than the 15 days. For example, if an Outage is expected to continue for 20 days, a Market Participant cannot be expected to provide 'full and final details' of the entire Outage before it is finished.

The IMO proposes that, given its reference to 'full and final details', clause 3.21.7 of the Market Rules should be amended to specifically refer to a particular Trading Day on which the outage occurred or continued to occur. This provides Market Participants with the ability to update the Outage information for each affected Trading Day on a rolling basis until the conclusion of the Outage, but retains the requirement to provide final details for each affected Trading Day within the 15 day timeframe.

### **Other minor amendments**

The IMO has also taken the opportunity to make minor grammatical and formatting amendments to clauses 3.18.4A, 3.21.5, 3.21.6, 3.21.7, 3.21.8, 3.21.10, 3.21.11 and 3.21.12 to improve the integrity of the Market Rules.

### **Protected Provisions, Reviewable Decisions and civil penalty provisions**

The IMO notes that under the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* (Regulations), clause 3.21.4 of the Market Rules is subject to a Category C civil penalty. The IMO considers that under the proposed Amending Rules it remains appropriate for this clause be a Category C civil penalty provision as the intent of the obligation in this clause has not changed. The IMO does not consider that there is a need for any proposed new clauses to be subject to civil penalties.

This Rule Change Proposal does not propose to amend, remove or add Protected Provisions

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<sup>2</sup> The Rule Change Proposal: Correction of Estimated Output of Intermittent Generation for Purposes of Appendix 9 (RC\_2013\_17) also addressed this issue, to the extent that it affects the certification of Intermittent Generators. Further details of this Rule Change Proposal are available at: [www.imowa.com.au/RC\\_2013\\_17](http://www.imowa.com.au/RC_2013_17).

under clause 2.8.13 of the Market Rules or Reviewable Decisions under clause 2.17.1 of the Market Rules.

The IMO will engage with the Public Utilities Office to progress this Rule Change Proposal.

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## 2. Explain the reason for the degree of urgency:

The IMO proposes to progress this Rule Change Proposal under the Standard Rule Change Process.

The IMO considers that the proposed amendments will benefit the market and involve minimal costs to the market, and therefore should be progressed prior to the completion of the State Government's Electricity Market Review.

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## 3. Provide any proposed specific changes to particular Rules: *(for clarity, please use the current wording of the Rules and place a ~~strikethrough~~ where words are deleted and underline words added)*

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 de-rating) of an item of equipment is a proposed outage plan ("**Outage Plan**").

...

### 3.21. Forced Outages and Consequential Outages

3.21.1. A Forced Outage is any outage of either a Facility or item of equipment on the list described in clause 3.18.2 or a Facility or generation system to which clause 3.18.2A relates that has not received System Management's approval, including:

...

(b) any part of a Planned Outage that exceeds or, for the purposes of clause 3.21.2(b) and (c), a Consequential Outage which will exceed its approved duration; and

...

3.21.2. A Consequential Outage is an outage of ~~either~~ a Facility or item of equipment on the list described in clause 3.18.2, or a Facility or generation system to which clause 3.18.2A relates ~~for which no approval was received from System Management, but which System Management determines, where:~~

(a) after receiving a notification under clause 3.21.4, System Management determines (under clause 3.21.2A) that the outage was caused by a Forced Outage to another Rule Participant's equipment or a Planned Outage to a Network Operator's equipment, and would not have occurred if the relevant

~~other Rule Participant's equipment did not suffer a~~ had not been affected by the Forced Outage or Planned Outage; or

~~(b)~~ after receiving a notification under clause 3.21.4A and at least 30 minutes before Balancing Gate Closure for the relevant Trading Interval or the first relevant Trading Interval, System Management determines (under clause 3.21.2A) that the outage will be caused by a Forced Outage to another Rule Participant's equipment or a Planned Outage to a Network Operator's equipment; or

~~(c)~~ after receiving a notification under clause 3.21.4A and as at 30 minutes before Balancing Gate Closure for the relevant Trading Interval or the first relevant Trading Interval:

~~(i)~~ the outage has not commenced;

~~(ii)~~ System Management has not determined (under clause 3.21.2A) that the outage will be caused by a Forced Outage to another Rule Participant's equipment or a Planned Outage to a Network Operator's equipment; and

~~(iii)~~ the affected Rule Participant reasonably expected, based on information that was available to it 30 minutes before Balancing Gate Closure, that the outage would occur and would be caused by a Forced Outage to another Rule Participant's equipment or a Planned Outage to a Network Operator's equipment.

~~(b)~~ was caused by a Planned Outage to a Network Operator's equipment and would not have occurred if the Network Operator's equipment did not undertake the Planned Outage,

~~but excludes any outage deemed not to be a Consequential Outage in accordance with clause 3.21.10.~~

3.21.2A. System Management must determine whether an outage notified under clause 3.21.4 or 3.21.4A, is a Consequential Outage, and must inform the Market Participant or Network Operator of its determination, as soon as reasonably practicable after being notified of the outage. System Management may make its determination before, during or after the outage occurs or was reasonably expected to occur.

3.21.2B. Subject to clause 3.21.9, if System Management considers that a determination under 3.21.2A was based on incorrect information, or has been superseded by new or updated information, then System Management may change the determination. For the avoidance of doubt, this clause 3.21.2B does not apply in respect of an outage that is a Consequential Outage under clause 3.21.2(c).

3.21.3. System Management must keep a record of all Forced Outages and Consequential Outages of which it is becomes aware.

3.21.4. A Market Participant or Network Operator must notify System Management as soon as practicable after ~~If a Facility or item of equipment that is on the list described in clause 3.18.2, or a Facility or generation system to which clause 3.18.2A relates, suffers~~ is de-rated as a result of a Forced Outage or Consequential Outage, then the relevant Market Participant or Network Operator must inform System Management of the outage as soon as practicable. The notice must include the information specified in clause 3.21.4B. ~~Information provided to System Management must include:~~

- ~~(a) the time the outage commenced;~~
- ~~(b) an estimate of the time the outage is expected to end;~~
- ~~(c) the cause of the outage;~~
- ~~(d) the Facility or item of equipment or Facilities or items of equipment affected; and~~
- ~~(e) for each affected Facility or item of equipment, the expected quantity of any de-rating by Trading Interval, where, if the Facility is a generating system, this quantity is to be submitted in accordance with clause 3.21.5.~~

3.21.4A. A Market Participant or Network Operator may notify System Management if a Facility or item of equipment that is on the list described in clause 3.18.2, or a Facility or generation system to which clause 3.18.2A relates, is (in the Market Participant's or Network Operator's opinion) likely to be is de-rated as a result of a Forced Outage or Consequential Outage, subject to System Management's determination under clause 3.21.2A. The notice must include the information specified in clause 3.21.4B.

3.21.4B. The information provided to System Management under clause 3.21.4 or 3.21.4A must include:

- (a) the time the outage commenced or is expected to commence;
- (b) an estimate of the time the outage ended or is expected to end;
- (c) the cause of the outage;
- (d) each Facility, item of equipment or generation system de-rated as a result of the outage; and
- (e) for each Facility, item of equipment or generation system de-rated as a result of the outage, the expected quantity of any de-rating by Trading Interval, where, if the Facility is a generating system, this quantity is to be submitted in accordance with clause 3.21.5; and
- (f) any other information necessary for verifying the details of the outage requested by System Management.

3.21.5. The quantity of an Outage notification submitted to System Management:

- (a) for a Scheduled Generator, is the reduction in capacity from the relevant Facility's Sent Out Capacity, maximum capacity measured on a sent out

~~basis at adjusted to 41 degrees Celsius where the maximum capacity is as found using the information provided in the Standing Data file for Temperature Dependence provided under Appendix 1(b)-(iv), and measured as an average over the Trading Interval and converted to a sent out basis at 41 degrees Celsius. The remaining capacity, determined as the maximum capacity Sent Out Capacity minus the notified outage, must be available to System Management for dispatch; and~~

(b) for a Non-Scheduled Generator, is the reduction in capacity from the relevant Facility's Sent Out Capacity, measured as an average over the Trading Interval.

3.21.6. The following will apply for a Scheduled Generator for the purposes of clauses 7.3.4 and 7.13.1A-(b):

- (a) ~~Outage data will~~must be entered by Market Participants in System Management's ~~computer interface system on an as generated~~sent out basis at 15 degrees Celsius. System Management will convert the Outage data entered by Market Participants in System Management's computer interface system to a sent out basis at 15 and 41 degrees Celsius. System Management will convert the Outage data from 15 degrees on a sent out basis to a sent out basis at 41 degrees Celsius by multiplying the Outage quantity at 15 degrees Celsius on sent out basis by the ratio of the maximum capacity Sent Out Capacity at 41 degrees Celsius to the maximum capacity Sent Out Capacity at 15 degrees Celsius for the Facility, as found in the Standing Data file for temperature dependence provided under Appendix 1(b)-(iv) on a generated basis for that Facility. Market Participants will submit the Outage data at 41 degrees Celsius on a generated basis as displayed by System Management's computer interface system;
- (b) System Management ~~will~~must calculate the Forced Outage ~~(on a sent out basis at 41 degrees Celsius)~~ for a Facility in a Trading Interval as the greater of:
- i. zero; and
  - ii. the sum of all Forced Outages notified for that Facility minus the difference ~~of between the Facility's maximum capacity Sent Out Capacity at 41 degrees Celsius and its Reserve Capacity Obligation Quantity;~~ the MW quantity corresponding to the number of Capacity Credits assigned to that Facility.
- (c) System Management ~~will~~must calculate the Planned Outage ~~(on a sent out basis at 41 degrees Celsius)~~ for a Facility in a Trading Interval as the greater of:
- i. zero; and
  - ii. the sum of all Planned Outages minus the greater of:
    1. zero; and

2. ~~the maximum capacity~~ Sent Out Capacity at 41 degrees Celsius of the Facility minus ~~its Reserve Capacity Obligation Quantity~~ the MW quantity corresponding to the number of Capacity Credits assigned to that Facility minus the sum of all Forced Outages notified for the Facility before the adjustment in clause 3.21.6(b) above is made by System Management; ~~and,~~
- (d) System Management ~~will~~ must calculate the Consequential Outage ~~(on a sent out basis at 41 degrees Celsius)~~ for a Facility in a Trading Interval as the greater of:
- i. zero; and
  - ii. the sum of all Consequential Outages minus the greater of:
    1. zero; and
    2. ~~the maximum capacity~~ Sent Out Capacity at 41 degrees Celsius of the Facility minus ~~its Reserve Capacity Obligation Quantity~~ the MW quantity corresponding to the number of Capacity Credits assigned to that Facility minus the sum of all Forced Outages and the sum of all Planned Outages notified for the Facility before the adjustments in clause 3.21.6(b) and (c) above are made by System Management; ~~;~~
- (e) ~~The IMO will~~ must provide System Management ~~the Reserve Capacity Obligation Quantity of~~ with a MW quantity corresponding to the number of Capacity Credits assigned to each Facility as currently applicable;
- (f) ~~the maximum capacity used in this clause is the value defined in clause 3.21.5.~~
- 3.21.7. 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 15~~fifteen~~ calendar days following each the Trading Day on which the Outage occurred or continued to occur.
- 3.21.8. ~~[Blank]~~ If a Market Participant considers that one of its Facilities has suffered a Consequential Outage then the Market Participant may provide System Management with a notice confirming details of the Consequential Outage no later than 15 calendar days following the Trading Day on which the Consequential Outage commenced. The notice must:
- (a) ~~be signed by an Authorised Officer of the Market Participant;~~
  - (b) ~~confirm that a Consequential Outage has occurred; and~~
  - (c) ~~provide details (to the best of its knowledge) of the events which resulted in the Consequential Outage.~~

- 3.21.9. In its determination of a Consequential Outage under clause 3.21.2A, System Management must accept the information provided by a Market Participant or Network Operator under clause 3.21.4 or 3.21.4A unless the information is inconsistent with other information held by System Management.
- 3.21.10. ~~[Blank] If a Market Participant informs System Management of a Consequential Outage under clause 3.21.4, but does not provide System Management with a notice in accordance with clause 3.21.8, then the outage will be deemed not to be a Consequential Outage and System Management must not include the outage as a Consequential Outage in the schedule provided to the IMO in accordance with clause 7.13.1A(b).~~
- 3.21.11. ~~[Blank] System Management must retain the notices it receives under clause 3.21.8, and must provide copies to the IMO:~~
- ~~(a) if requested by the IMO; and~~
  - ~~(b) at least once every six months.~~
- 3.21.12. System Management must document the procedure to be followed in determining and reporting Forced Outages and Consequential Outages in the Power System Operation Procedure and System Management, Market Participants and Network Operators must follow that documented Market Procedure.

...

- 4.25.3A. The IMO must not subject a Facility to a Reserve Capacity Test if:

...

- (b) the relevant Market Participant has advised System Management of a Forced Outage or Consequential Outage for that Facility in accordance with clause 3.21.4 or 3.21.4A; or

...

...

- 7.10.2. A Market Participant is not required to comply with clause 7.10.1 if:

...

- (c) both of the following apply:
  - i. the Market Participant has notified System Management, in accordance with clause 3.21.4 or 4.21.4A, that its Registered Facility has been affected, or will be affected, by a Forced Outage or Consequential Outage; and

...

...

7.13.1A. System Management must provide the IMO with the following data for a Trading Day by noon on the 15th Business Day following the day on which the Trading Day ends:

...

(b) the schedule of all Planned Outages, Forced Outages and Consequential Outages relating to each Trading Interval in the Trading Day by Market Participant and Facility as measured on a sent out basis at:

i. 15 degrees Celsius for Scheduled Generators and Non-Scheduled Generators; and

ii. 41 degrees Celsius for Scheduled Generators.

...

7.13.1G. The information required to be provided by System Management to the IMO under clause 7.13.1F must include:

...

(b) the information provided under clauses 3.21.4B(a) - 3.21.4(d);

(c) the time and date when:

i. the Forced Outage was first notified to System Management;

ii. the outage status was amended by System Management; and

iii. System Management recorded in its computer interface system that a Consequential Outage occurred as determined under clause 3.21.2A; and

...

...

## Glossary

...

**Available Capacity:** Means, for a Trading Interval and for a Scheduled Generator or a Non-Scheduled Generator, the Sent Out Capacity, in MW, ~~of a Scheduled Generator or a Non-Scheduled Generator that was not subject to an~~ less the quantity, in MW, of any Outage notified to the IMO under clause 7.13.1A(b)(i).

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#### 4. Describe how the Rule Change Proposal would allow the Market Rules to better address the Wholesale Market Objectives:

The IMO considers that the proposed amendments will better achieve Wholesale Market Objectives (a) and (d) and are consistent with the remaining Wholesale Market Objectives.

(a) to promote the economically efficient, safe and reliable production and supply of

electricity and electricity related services in the South West interconnected system; and

- (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system.

The IMO considers that the proposed amendments will better address Wholesale Market Objectives (a) and (d) by:

- removing from the Consequential Outage process the unnecessary administrative burden associated with:
  - Market Participants and Network Operators having to provide System Management a notice signed by an Authorised Officer confirming the details of a Consequential Outage; and
  - System Management retaining the authorised notices related to Consequential Outages and providing copies of these to the IMO;
- providing greater Outage transparency by better distinguishing, where possible between a Consequential Outage and a Forced Outage in advance (i.e. a Consequential Outage can be logged as such in the first instance, rather than being logged as a Forced Outage first and then converted later to a Consequential Outage);
- ensuring that the IMO is able to comply with its existing obligations by allowing it to provide System Management with each Facility's MW value of Capacity Credits (rather than each Facility's RCOQ) for the purpose of calculating Outage quantities;
- providing for advance notification of Consequential Outages to ensure greater transparency of Facility availability to Market Participants and thereby improving the accuracy of the Balancing Price forecast; and
- providing greater clarity and transparency with respect to existing obligations in the Market Rules to better equip Market Participants to comply with their obligations and therefore reducing the administrative overheads associated with interpreting and complying with the Market Rules.

The IMO considers that the proposed amendments are consistent with the remaining Wholesale Market Objectives.

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## 5. Provide any identifiable costs and benefits of the change:

System Management is anticipated to incur some costs associated with the system changes required by the amendments relating to:

- providing the functionality in SMMITS for Consequential Outages to be directly, requested by Market Participants and approved by System Management;
- providing to the IMO Outage quantities for each Facility for each Trading Interval on a sent out basis at 15 degrees Celsius; and
- calculating the quantity of a de-rating for a Non-Scheduled Generator.

However, the IMO understands that these costs are relatively minor and can be incorporated within System Management's existing budget.

The IMO anticipates that there will be some IMO system changes required for it to receive Outage quantities for each Facility for each Trading Interval on a sent out basis at 15 degrees Celsius but considers that these costs are not likely to be significant.

The market is likely to experience a net economic benefit as a result of:

- the streamlined Consequential Outage process which will reduce administrative costs for Market Participants and System Management;
- greater certainty for Market Participants around the application of the Market Rules which will ensure investment and operational decisions are better informed and therefore less likely to lead to inefficient outcomes; and
- the improved ease of applying the Market Rules, resulting in more efficient behaviours.

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## **6. Provide any identifiable issues with respect to the practicality of implementation:**

The IMO will work with System Management to review and make any necessary amendments to section 8.1 of the PSOP: Dispatch and the PSOP: Facility Outage.

The IMO considers that the amendments proposed within this Rules Change Proposal are consistent with and do not overlap with the amendments to the Outage planning process proposed as part of the Rule Change Proposal: Outage Planning Phase 2 – Outage Process Refinements (RC\_2013\_15<sup>3</sup>).

System Management estimates that the required system changes will take approximately three months to implement. The IMO expects it will also be able to complete its system changes within this timeframe. The IMO has considered System Management's implementation with respect to its proposed commencement date of 1 August 2015.

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<sup>3</sup> The Draft Rule Change Report for RC\_2013\_15 has been deferred pending the outcomes of the State Government's Electricity Market Review. More information is available at: [www.imowa.com.au/RC\\_2013\\_15](http://www.imowa.com.au/RC_2013_15).