

The background of the lower half of the page is a photograph of a wind farm and power lines, overlaid with a semi-transparent blue filter. On the left, several large white wind turbines are visible, their blades extending outwards. On the right, a tall, lattice-structured power transmission tower stands prominently. The overall scene is set in an open, hilly landscape under a clear sky.

**Independent Market Operator**

**Final Market Rule Change  
Report**

**Title: Intermittent Load Refund  
Maximum**

**Ref: RC\_2008\_25**

**Date: 22 December 2008**

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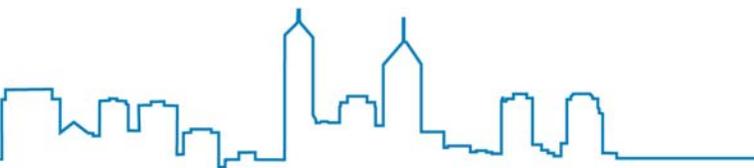
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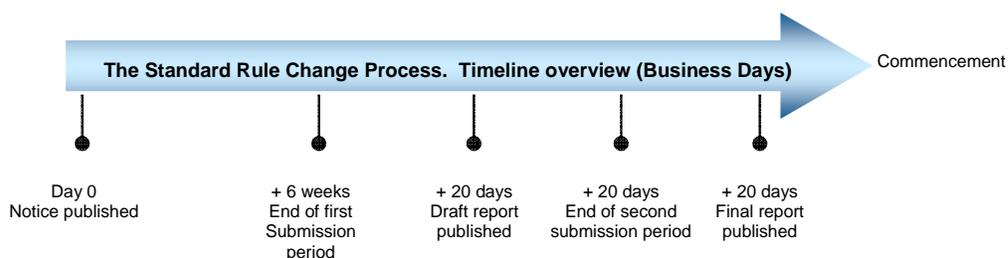


## 1. INTRODUCTION

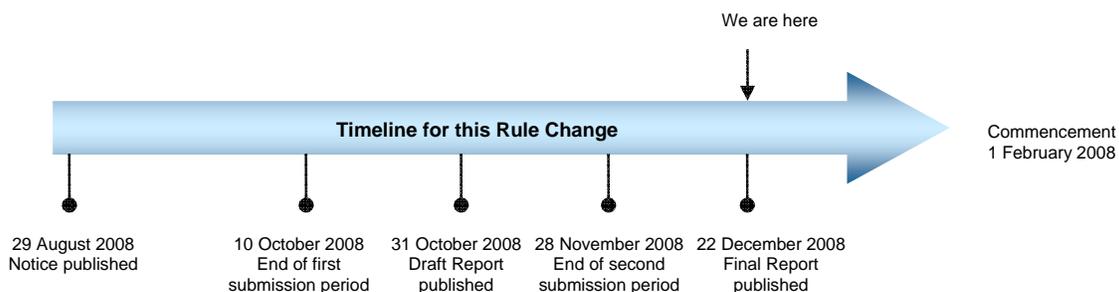
On 28 August 2008, the Independent Market Operator (IMO) submitted a Rule Change Proposal regarding changes to clause 4.28.A.1 of the Wholesale Electricity Market Rules (Market Rules).

This Proposal was processed using the Standard Rule Change Process, described in section 2.7 of the Market Rules.

The standard process adheres to the following timelines:



The key dates in processing this Rule Change Proposal are:



Based on the submissions received, the IMO's final decision is to implement the Rule Change Proposal in the form outlined in section 7 of this Report.

This Final Rule Change Report on the Rule Change Proposal has been prepared by the IMO in accordance with clause 2.7.8 of the Market Rules.

The amendments to the Market Rules made as a result of this Rule Change Proposal will commence at 08.00am on 1 February 2009.

## 2. THE RULE CHANGE PROPOSAL

### 2.1 Submission Details

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<b>Date submitted:</b>	28/08/2008
<b>Urgency:</b>	Medium
<b>Change Proposal title:</b>	Intermittent Load Refund Maximum

### 2.2 Details of the Proposal

The IMO submitted that clause 4.28A.1 determines the Intermittent Load Refund. An Intermittent Load is normally served by its own generator and as such it has a significantly reduced Individual Reserve Capacity Requirement (IRCR) payment obligation. Occasionally the Intermittent Load could draw from the system, for example, when its generator is experiencing a full or partial outage. When this happens the Intermittent Load is liable for a payment – the Intermittent Load Refund.

The IMO proposed that a Market Customer who registered an Intermittent Load could reduce the refund by nominating a capacity requirement for the Intermittent Load. The IMO explained that an IRCR is then determined from the nominated capacity requirement but is limited to a contribution to the system's reserve margin.

The IMO submitted that the Intermittent Load Refund is determined through the steps outlined below. The Trading Interval refund is first determined in accordance with either (a) or (b) and then summed up over the Trading Intervals in the Trading Month and over all Intermittent Loads registered by the Market Participant. The refund is then capped under (c).

- a) If the generator serving the Intermittent Load is on a planned outage then:
  1. If the Intermittent Load draws from the system less than 103% of its nominated capacity requirement then the refund capacity is zero.
  2. If the Intermittent Load draws from the system more than 103% of its nominated capacity requirement then the refund capacity is its excess draw from the system over 103% of its nominated capacity requirement.

- b) If the generator serving the Intermittent Load is not on a planned outage then:
  - 1. If the Intermittent Load is not drawing on the system or draws less than 3% of its nominated capacity requirement then the refund capacity is zero.
  - 2. If the Intermittent Load draws from the system more than 3% of its nominated capacity requirement then the refund capacity is its excess draw from the system over 3% of its nominated capacity requirement.
- c) The total participant refund for a Trading Month is determined from summing up the refunds determined under either (a) or (b) above for all the Intermittent Loads registered by the participant and using the same refund rates applicable to Scheduled Generators. It is then capped at no more than the maximum determined in accordance with (d) below.
- d) The monthly maximum refund for a participant is the 12-month value of its nominated capacity requirements for its Intermittent Loads calculated at the Monthly Reserve Capacity Price less the cumulative refunds the participant has made since the start of the Capacity Year.

The cap in (d) above mimics the maximum refund that applies to generators.

According to the IMO, as the Market Rules are currently worded, the maximum refund is set by the same nominated capacity requirement. This forces the nominated capacity requirement to determine both the level the Market Customer has chosen to draw from the market, in anticipation of its Intermittent Load generator planned outage, and the refund cap. The refund the market is entitled to from the Intermittent Load, when the Intermittent Load is drawing from the system, should also cover the excess load the Intermittent Load is drawing over the capacity the Intermittent Load has nominated. The maximum the Intermittent Load can draw from the system is its maximum consumption capability – the physical maximum. It is not appropriate to cap this by the capacity the Market Customer has nominated in registration.

The IMO posited that in the case of an Intermittent Load there is no reserve capacity supplied into the market. The Intermittent Load is not earning a Reserve Capacity Credit payment that has to be refunded to the market when the reserve capacity is not supplied. The Intermittent Load Refund is not a refund as in the case of a generator but a payment for the use of reserve capacity provided by the market. It is not appropriate to cap refunds in the case of an Intermittent Load and therefore the IMO proposed to remove clause 4.28A.1(b).

### **2.3 The Proposal and the Market Objectives**

The IMO's submission regarding how the amendments will allow for the Market Rules to better address the market objectives can be found in section 6.1.2 of this report.

## 2.4 The Amending Rules Proposed by the IMO

The amendments to the Market Rules proposed by the IMO were as follows (~~deleted wording, new wording~~):

- 4.28A.1 The IMO must determine for each Intermittent Load registered to Market Participant p the amount of the refund (“Intermittent Load Refund”) to be applied for each Trading Month m in respect of that Intermittent Load as the sum over all Trading Intervals t of Trading Day d in the Trading Month m of the product of: ~~using the methodology for determining Capacity Cost Refunds as described in clause 4.26.3 assuming:~~
- (a) ~~that the applicable value of Y in the Refund Table described in clause 4.26.1 is that which applies for Scheduled Generators; and~~
  - (b) ~~that the Maximum Refund defined in the Refund Table described in clause 4.26.1 is, for a given Intermittent Load and Trading Month, set to equal the value of Reserve Capacity payments that would have been made to the generation system described in clause 2.30B.2(a) for the 12 Trading Months commencing at the start of the Trading Day of the previous 1 October assuming that the IMO had procured Reserve Capacity from it for each of those months equal to the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c) at the prevailing Monthly Reserve Capacity Price.~~
  - (c) ~~that the Capacity Shortfall for Trading Interval t of Trading Day d and Trading Month m which is the greater of zero and:~~
    - i. double the MWh of the Intermittent Load metered during that Trading Interval (where for the purpose of this calculation the metered amount should be defined at the meter rather than being Loss Factor adjusted so as to be measured at the Reference Node), less;
    - ii. if the generating system described in clause 2.30B.2(a) is undergoing a Planned Outage or a Consequential Outage, the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less
    - iii. 3% of the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less
    - iv. for Trading Intervals where the temperature data described in clause 4.28A.2 shows a temperature in excess of 41°C and the generating system described in clause 2.30B.2(a) is not undergoing a Planned Outage, Forced Outage or a Consequential Outage, the capacity reduction, if any, specified in accordance with clause 2.30B.3(b)(i).

## **2.5 The IMO's Initial Assessment of the Proposal**

The IMO decided to proceed with the proposal on the basis of its preliminary assessment, which indicated that the proposal was consistent with the Wholesale Market Objectives. The preliminary assessment was published in a Rule Change Notice on 29 August 2008.

## **3. SUBMISSIONS RECEIVED IN THE FIRST SUBMISSION PERIOD**

The first submission period for this Rule Change Proposal was between 29 August 2008 and 10 October 2008. The IMO received one submission, from Landfill Gas and Power Pty Ltd (LGP). The submission is summarised below, and the full text is available on the IMO website.

### **3.1 Market Advisory Committee**

The Market Advisory Committee (MAC) discussed the proposed Rule Change at two consecutive meetings, 8 August 2008 and 10 September 2008. MAC supported the Rule Change as proposed, with a minor typographical amendment agreed at the second meeting (removing the brackets from 4.28A.1(c) (i) of the Amending Rules). MAC agreed that the Rule Change Proposal should be formally submitted by the IMO.

### **3.2 Submission from LGP**

LGP supported the proposed Rule Change on the premise that it is not appropriate for an Intermittent Load to have its capacity refunds (that is, payments to the market) capped as though the load were a generator at a capacity nominated by the load itself. Rather the load should pay for the utilization of system capacity on the basis of its actual draw.

### **3.3 Public Forums and Workshops**

No public forums or workshops were held in relation to this Rule Change.

## **4. THE IMO'S DRAFT DECISION**

The IMO's draft decision was to implement the proposed amendments to clause 4.28A.1 of the Wholesale Electricity Market Rules as proposed by the IMO in its Rule Change Proposal and further amended in the Draft Rule Change Report.



The IMO made its draft decision on the basis that the resulting Amending Rules allowed the Market Rules to better address the Wholesale Market Objectives.

#### 4.1 The Amending Rules

In its draft report the IMO proposed to implement the following amendments, as suggested by the MAC, to the Market Rules (added words are underlined and deletions are shown with ~~strikethrough~~):

- 4.28A.1 The IMO must determine for each Intermittent Load registered to Market Participant p the amount of the refund (“Intermittent Load Refund”) to be applied for each Trading Month m in respect of that Intermittent Load as the sum over all Trading Intervals t of Trading Day d in the Trading Month m of the product of: ~~using the methodology for determining Capacity Cost Refunds as described in clause 4.26.3 assuming:~~
- (a) ~~that the applicable value of Y in the Refund Table described in clause 4.26.1 is that which applies for Scheduled Generators; and~~
  - (b) ~~that the Maximum Refund defined in the Refund Table described in clause 4.26.1 is, for a given Intermittent Load and Trading Month, set to equal the value of Reserve Capacity payments that would have been made to the generation system described in clause 2.30B.2(a) for the 12 Trading Months commencing at the start of the Trading Day of the previous 1 October assuming that the IMO had procured Reserve Capacity from it for each of those months equal to the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c) at the prevailing Monthly Reserve Capacity Price.~~
  - (c) ~~that the Capacity Shortfall for Trading Interval t of Trading Day d and Trading Month m~~ which ~~is the greater of zero and:~~
    - i. double the MWh of the Intermittent Load metered during that Trading Interval, ~~{where for the purpose of this calculation the metered amount should be defined at the meter rather than being Loss Factor adjusted so as to be measured at the Reference Node}, less;~~
    - ii. if the generating system described in clause 2.30B.2(a) is undergoing a Planned Outage or a Consequential Outage, the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less
    - iii. 3% of the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less

- iv. for Trading Intervals where the temperature data described in clause 4.28A.2 shows a temperature in excess of 41°C and the generating system described in clause 2.30B.2(a) is not undergoing a Planned Outage, Forced Outage or a Consequential Outage, the capacity reduction, if any, specified in accordance with clause 2.30B.3(b)(i).

## 5. SUBMISSIONS RECEIVED IN THE SECOND SUBMISSION PERIOD

Following the Draft Rule Change Report publication on the IMO website, the second submission period was between 3 November 2008 and 28 November 2008. The IMO did not receive any formal submissions during this period.

## 6. THE IMO'S ASSESSMENT AND THE IMO'S FINAL DECISION

### 6.1 Assessment

#### 6.1.1 Submissions

No interested party expressed concerns regarding the amendments to the Market Rules outlined in the Draft Rule Change Report. The IMO therefore considers that the proposed amendments to the Market Rules have the support of the Participants in the Wholesale Electricity Market.

#### 6.1.2 The IMO's Assessment

According to clause 2.4.2 of the Market Rules *"the IMO 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"*.

The IMO considers that the proposed Amending Rules will have the following impact on how the Market Rules address the Wholesale Market Objectives:

Impact	Wholesale Market Objectives
Allow the Market Rules to better address objective	a
Consistent with objective	b, c, d and e
Inconsistent with objective	-

The IMO's assessment against market objective (a) is as follows:

*(a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system.*

The proposed amendments support this objective by ensuring that Intermittent Loads contribute to a more equitable share of the reserve capacity cost.

It will be necessary to make some changes to the IMO settlement systems in implementing this Rule Change. The IMO has obtained a quote from its systems support vendor for approximately \$590 AUD (\$400 USD) to carry out the system changes.

No other costs have been identified in relation to the implementation of the proposed changes.

## **6.2 The IMO's Final Decision**

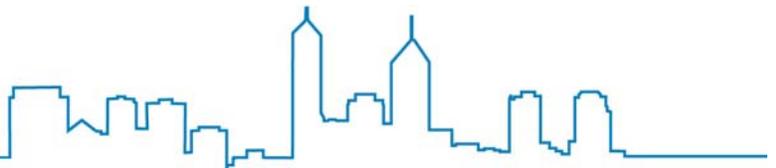
The IMO's final decision is to implement the proposed amendments to clause 4.28A.1 of the Wholesale Electricity Market Rules.

The wording of the relevant amendment is provided in section 7 of this report.

The IMO has made its decision on the basis that the Amending Rules will allow the Market Rules to better address the Wholesale Market Objectives.

## **6.3 Amending Rules Commencement**

The amendments resulting to the Market Rules resulting from this Rule Change Proposal will commence at 8:00am on 1 February 2009.



## 7. AMENDING RULES

The following clauses are amended (~~deleted wording~~, new wording):

- 4.28A.1 The IMO must determine for each Intermittent Load registered to Market Participant p the amount of the refund (“Intermittent Load Refund”) to be applied for each Trading Month m in respect of that Intermittent Load as the sum over all Trading Intervals t of Trading Day d in the Trading Month m of the product of: ~~using the methodology for determining Capacity Cost Refunds as described in clause 4.26.3 assuming:~~
- (a) ~~that~~ the applicable value of Y in the Refund Table described in clause 4.26.1 is that which applies for Scheduled Generators; and
  - (b) ~~that the Maximum Refund defined in the Refund Table described in clause 4.26.1 is, for a given Intermittent Load and Trading Month, set to equal the value of Reserve Capacity payments that would have been made to the generation system described in clause 2.30B.2(a) for the 12 Trading Months commencing at the start of the Trading Day of the previous 1 October assuming that the IMO had procured Reserve Capacity from it for each of those months equal to the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c) at the prevailing Monthly Reserve Capacity Price.~~
  - (c) ~~that~~ the Capacity Shortfall for Trading Interval t of Trading Day d and Trading Month m which is the greater of zero and:
    - i. double the MWh of the Intermittent Load metered during that Trading Interval<sub>t</sub> (where for the purpose of this calculation the metered amount should be defined at the meter rather than being Loss Factor adjusted so as to be measured at the Reference Node), less;
    - ii. if the generating system described in clause 2.30B.2(a) is undergoing a Planned Outage or a Consequential Outage, the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less
    - iii. 3% of the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less
    - iv. for Trading Intervals where the temperature data described in clause 4.28A.2 shows a temperature in excess of 41°C and the generating system described in clause 2.30B.2(a) is not undergoing a Planned Outage, Forced Outage or a Consequential Outage, the capacity reduction, if any, specified in accordance with clause 2.30B.3(b)(i).



## 8. GENERAL INFORMATION ABOUT RULE CHANGE PROPOSALS

Clause 2.5.1 of the Wholesale Electricity Market Rules (Market Rules) provides that any person (including the Independent Market Operator) may make a Rule Change Proposal by completing a Rule Change Proposal Form and submitting this to the Independent Market Operator (IMO).

In order for the proposal to be progressed, the change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the Wholesale Market Objectives. The 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
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used

A Rule Change Proposal can be processed using a Standard Rule Change Process or a Fast Track Rule Change Process. The standard process involves a combined 10 weeks public submission period. Under the shorter fast track process the IMO consults with Rule Participants who either advise the IMO that they wish to be consulted or the IMO considers have an interest in the change.

