

Independent Market Operator



## **Rule Change Notice**

### **Title: Reserve Capacity Refund Shortfall Formula**

Ref: RC\_2007\_05

Date: 21 May 2007

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## INTRODUCTION

Market Rule 2.5.1 of the Wholesale Electricity 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 submit this to the Independent Market Operator (IMO).

The IMO will assess the proposal and, within 5 Business Days of receiving the Rule Change Proposal Form, will notify the proponent whether the Rule Change Proposal will be progressed further.

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 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.

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

## THE RULE CHANGE PROPOSAL

### ***The Submission***

The IMO submitted, on 11 May 2007, a Rule Change Proposal regarding a change to clause 4.26.2(b) in the Wholesale Electricity Market Rules.

This Rule Change Notice is published according to Market Rule 2.5.7, which requires the IMO to publish a notice within 7 Business Days of receiving a Rule Change Proposal.

### *Submission details*

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Date submitted: 11/05/2007  
Urgency: High  
Change Proposal title: Reserve Capacity Refund Shortfall Formula

### ***Details of the Proposal***

The IMO submits that the correction, in December 2006, to a potential anomaly in the Reserve Capacity Shortfall calculations, which led to an overstatement of a Market Participant's fulfilment of its Reserve Capacity obligation, may have had an unintended adverse impact on participant refund calculations.

Prior to the change implemented in December 2006, Clause 4.26.2(b) of the Market Rules read as follows:

- (b) subject to paragraph (a), for the case where Market Participant p is not the Electricity Generation Corporation, the sum of:
  - i. the sum of the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads and Curtailable Loads; plus
  - ii. the MW quantity calculated by doubling the total MWh quantity of energy sent out during that Trading Interval by Facilities registered by that Market Participant as indicated by the applicable Resource Plan; plus
  - iii. the MW quantity calculated by doubling the total MWh quantity covered by the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by the IMO for that Market Participant under clause 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
  - iv. double the total MWh quantity to be provided as Ancillary Services as specified by the IMO in accordance with clause 6.3A.2(e)(i) for that Market Participant corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
  - v. the greater of zero and  $(BSFO(p,d,t) - RTFO(p,d,t))$ ; and

In order to determine whether a Market Generator had fulfilled its obligation to offer all of its capacity covered by capacity credits into the Market, Clause 4.26.2(b) added together the following quantities:

- The capacity associated with the quantities offered into the STEM but not cleared
- The capacity associated with the quantities bid into the STEM and scheduled
- The capacity associated with the quantities scheduled to be generated in a Resource Plan
- The capacity kept aside for Ancillary Services

- The capacity not available due to a forced outage before the STEM submission but subsequently available in real time.

This formula resulted in a Market Generator, which was also a Market Customer, potentially overstating the fulfilment of its Reserve Capacity obligation. This is because in practice the “quantities scheduled to be generated in a Resource Plan” would normally cover the participant’s own demand and this demand would normally also be included in the “quantities offered into the STEM but not cleared”.

To avoid this anomaly in the Reserve Capacity Shortfall calculations, the participant’s own demand has to be deducted from its capacity scheduled to be generated where the demand is included in a Resource Plan. To achieve this, in November 2006, the Transitional Market Advisory Committee considered and accepted a proposal to amend clause 4.26.2(b)ii as follows:

- ii. the MW quantity calculated by doubling the total MWh quantity of energy sent out by Facilities registered by that Market Participant net of the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Curtailable Load or Interruptible Load, but excluding demand associated with any Dispatchable Load during that Trading Interval as indicated by the applicable Resource Plan; plus

This change to the Rules was implemented in December 2006. The IMO submits that experience in the market since the change was made has demonstrated that, while the change addressed the originally identified issue, it could have an unintended detrimental impact on participant refund calculations in certain circumstances.

The IMO considers that in practice, the current formula could result in understatement of the capacity made available to the market. This is due to the change being based on the assumption that participants holding Capacity Credits would normally make STEM submissions and ensure that their own demand is included in the “quantities offered into the STEM but not cleared”. The change provided, therefore, that a participant’s own demand (as included in a Resource Plan) is deducted from its capacity scheduled to be generated in the Resource Plan to avoid double-counting of the relevant capacity.

However, where a STEM submission is not available, the IMO considers that the calculation has the potential to underestimate the capacity made available to the market.

The IMO notes that this circumstance can arise in the case of Intermittent Generators, which are not obliged to make STEM submissions, and that this was overlooked in the rule change implemented in December 2006.

Therefore, the IMO proposes to amend the rules to add back the participant’s own demand in the determination of the Reserve Capacity Shortfall, to account for circumstances where a participant does not have a valid STEM submission in any Trading Interval.

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

The objectives of the market as set out in clause 1.2.1 of the Market Rules 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.*

Properly accounting for participants meeting their reserve capacity obligations contributes positively to this objective by:

- In the immediate term, ensuring that participants are treated equitably in the reserve capacity mechanism; and
- In the longer term, efficient investment in capacity required by the market through providing correct signals for making capacity available.

Therefore, the IMO considers that the proposed rule change will assist in promoting the economically efficient and reliable production and supply of electricity in the market.

- (b) *to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors.*

Removing the inaccuracies in the Reserve Capacity Refund shortfall formula will enhance the market as an equitable platform by ensuring that all participants are treated in an equitable and fair manner. This will contribute to the encouragement of competition and facilitate entry of new competitors. The IMO considers that the proposed changes, therefore, are consistent with the operation of objective (b) of the Market Objectives.

- (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.*

The current formula may produce an unintended penalty in the case of Intermittent Generators in certain circumstances. The IMO considers, therefore, that correcting the formula in a timely manner to avoid this will contribute positively the operation of objective (c) of the Market Objectives.

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

The IMO considers that, by avoiding inappropriate financial consequences for participants, the rule change proposal would contribute positively to the operation of objective (d) of the Market Objectives.

- (e) *to encourage the taking of measures to manage the amount of electricity used and when it is used.*

The IMO considers that the proposed changes do not impact on, and therefore are consistent with, the operation of objective (e) of the Market Objectives.

## WHETHER THE PROPOSAL WILL BE PROGRESSED FURTHER

The IMO has decided to proceed with this proposal on the basis that the IMO's preliminary assessment indicated that the proposal is consistent with the Market Objectives.

The IMO has decided to process this Rule Change Proposal using the Fast Track Process, described in section 2.6 of the Wholesale Electricity Market Rules.

Section 2.5.9 states:

*The IMO may subject a Rule Change Proposal to the Fast Track Rule Change Process if, in its opinion, the Rule Change Proposal:*

- (a) is of a minor or procedural nature; or*
- (b) is required to correct a manifest error; or*
- (c) is urgently required and is essential for the safe, effective and reliable operation of the market or the SWIS.*

The current clause 4.26.2(b)ii, which resulted from a change made in November 2006, could give rise to an inappropriate capacity refund and disadvantage participants even though they have complied with their obligations. This is a manifest error that should be corrected through the Fast Track process to avoid further unjustified financial consequences for participants.

The projected timelines for processing this proposal are:

- This Rule Change Notice published 21/05/2007
- Consultation period 21/05/2007 - 11/06/2007
- Final Report published 18/06/2007

## PROPOSED AMENDING RULE

Clause 4.26.2(b) is proposed to be amended as follows:

- (b) subject to paragraph (a), for the case where Market Participant p is not the Electricity Generation Corporation, the sum of:
  - i. the sum of the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads and Curtailable Loads; plus
  - ii. the MW quantity calculated by doubling the total net MWh quantity of energy sent out by Facilities registered by that Market Participant ~~net of the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Curtailable Load or Interruptible Load, but excluding demand associated with any Dispatchable Load during that Trading Interval~~ calculated as the Net Contract Position less the shortfall as indicated by the applicable Resource Plan; plus

iiA if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Curtailable Load or Interruptible Load, but excluding demand associated with any Dispatchable Load during that Trading Interval as indicated by the applicable Resource Plan; plus

[Balance of clause not changed]

## CONSULTATION

Any Rule Participant wishing to be consulted regarding this rule change is invited to notify the IMO within 5 Business Days of this notice being published.

The IMO prefers to receive notifications for consultation by email to **marketadmin@imowa.com.au**.

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

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