Wholesale Electricity Market Market Rule Change Proposal

Rule Change ID: RC_2007_36 Date received by IMO: 19 December 2007

Submitted by

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Date submitted:	19 December 2007
Urgency:	Medium
Change Proposal title:	Maximum Refund
Market Rule(s) affected:	4.26.1, 4.26.1A, 4.26.1B, 4.26.2, 4.26.3, and Glossary

Introduction

Market Rule 2.5.1 of the Wholesale Electricity 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 Independent Market Operator.

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

Independent Market Operator

Attn: Dora Guzeleva, Manager Market Administration PO Box 7096 Cloisters Square, Perth, WA 6850

Fax: (08) 9254 4399 Email: dora.guzeleva@imowa.com.au

The Independent Market Operator will assess the proposal and, within 5 Business Days of receiving this Rule Change Proposal form, will notify 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 electricity 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;
- 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.

Details of the proposed Market Rule Change

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

Clause 4.26.1 includes a Refund Table that sets the levels of Reserve Capacity Refunds that would be applied in the event that a Market Participant which holds Capacity Credits does not meet its Reserve Capacity Obligations. The Reserve Capacity Obligations are calculated in accordance with clause 4.12.1. The refund quantities are calculated across the sum of all facilities held by a Market Participant under the current provisions of clause 4.26.1.

The Refund Table includes a term "Maximum Refund". The IMO understands that it is widely accepted that this limits the level of refunds associated with any individual Facility to the amount of capacity credit payments accruing to that individual Facility. However, as the rule is written, and has been implemented, the "Maximum Refund" applies to the entire Facility portfolio associated with a Market Participant rather than to individual Facilities.

In practice, the Maximum Refund for a major outage of a Facility that is the sole Facility owned by a Market Participant cannot exceed the value of the Reserve Capacity Payments associated with that Facility. However, as a result of the current outworking of the Rules, for a Market Participant with a portfolio of Facilities, the Maximum Refund for an identical outage may be higher. This does not appear to be equitable. It may also provide an incentive for Market Participants to establish numerous entities, each holding a single Facility.

2) Explain the reason for the degree of urgency:

This change should be implemented as soon as practicable to remove the potential inequality of treatment of Market Participants and to remove the incentive to register numerous entities.

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 <u>underline</u> words added)

4.26.1. If a Market Participant holding Capacity Credits fails to comply with its Reserve Capacity Obligations applicable to any given Trading Interval then the Market Participant must pay a refund to the IMO calculated in accordance with the following provisions.

Dates	1 April to 1 October	1 October to 1 December	1 December to 1 February	1 February to 1 April	
Business Days Off-Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y	
Business Days Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	1.5 x Y	1.5 x Y	4 x Y	6 x Y	
Non-Business Days Off- Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y	
Non-Business Days Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	0.75 x Y	0.75 x Y	1.5 x Y	2 x Y	
Maximum <u>Participant</u> Refund	The total value of the Capacity Credit payments paid or to be paid under these Market Rules to the relevant Market Participant for the 12 Trading Months commencing at the start of the Trading Day of the previous 1 October assuming the IMO acquires all of the Capacity Credits held by the Market Participant and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable).				

REFUND TABLE

Where:

For an Intermittent Facility that has been commissioned: Y equals 0

For all other facilities, including Intermittent Facilities that have not been commissioned: Y equals the greater of the Reserve Capacity Price and 85% of the Maximum Reserve Capacity Price for the relevant Reserve Capacity Auction, expressed as a \$ per MW per Trading Interval figure. This is determined by dividing the Monthly Reserve Capacity Price by the number of Trading Intervals in the relevant month.

4.26.1A. The IMO must calculate the Forced Outage refund for each Facility ("Facility Forced Outage Refund") as the lesser of:

(a) the sum over all Trading Intervals t in Trading Month m of the product of:

I. the Off-Peak Trading Interval Rate or Peak Trading Interval Rate

II. the Forced Outage Shortfall in Trading Interval t,

where the Forced Outage Shortfall for a Facility is equal to the forced outage in that Trading Interval measured in MW, and

- (b) the total value of the Capacity Credit payments associated with the relevant Facility paid or to be paid under these Market Rules to the relevant Market Participant for the 12 Trading Months commencing at the start of the Trading Day of the previous 1 October, assuming the IMO acquires all of the Capacity Credits associated with that Facility and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable), less all Facility Forced Outage Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year.
- 4.26.1B. The IMO must calculate the Forced Outage refund for each Market Participant ("Participant Forced Outage Refund") as the sum of the Facility Forced Outage Refunds for each facility registered to the relevant Market Participant.
- 4.26.2. The IMO must determine the <u>net STEM shortfall ("Net STEM Shortfall")</u> capacity shortfall ("Capacity Shortfall") in Reserve Capacity supplied by each Market Participant p holding Capacity Credits in each Trading Interval t of Trading Day d and Trading Month m relative to its Reserve Capacity Obligation Quantity as:

 $\begin{aligned} \mathsf{SF}(\mathsf{p},\mathsf{m},\mathsf{d},\mathsf{t}) &= & \mathsf{Max}(\mathsf{RTFO}(\mathsf{p},\mathsf{d},\mathsf{t}), \ \mathsf{RCOQ}(\mathsf{p},\mathsf{d},\mathsf{t}) - \mathsf{A}(\mathsf{p},\mathsf{d},\mathsf{t})) + & \mathsf{Max}(\mathsf{0}, \ \mathsf{B}(\mathsf{p},\mathsf{d},\mathsf{t}) - \mathsf{C}(\mathsf{p},\mathsf{d},\mathsf{t})) \\ &- & \mathsf{RTFO}(\mathsf{p},\mathsf{d},\mathsf{t}) \end{aligned}$

[balance of clause not changed]

- 4.26.3 For each Market Participant holding Capacity Credits, the IMO must determine the amount of the refund ("**Capacity Cost Refund**") to be applied for Trading Month m in respect of a Capacity Shortfall as defined in clauses 4.26.2 during that Trading Month. The Capacity Cost Refund is the lesser of:
 - (a) the Maximum <u>Participant</u> Refund determined in accordance with the Refund

Table, less all Capacity Cost Facility Forced Outage Refunds and all Net <u>STEM</u> Refunds applicable to the Market Participant in previous Trading Months falling in the same Capacity Year as Trading Month m; and

(b) the sum over all Trading Intervals t in Trading Month m of <u>the Participant</u> <u>Forced Outage Refund and Net STEM</u> Refund,

where the Net STEM Refund is the product of:

- i. the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and
- ii. the <u>Net STEM</u> Capacity Shortfall in Trading Interval t.

11 Glossary

Capacity Shortfall: Has the meaning given in clause 4.26.2.

Facility Forced Outage Refund: Has the meaning given in clause 4.26.1A.

Forced Outage Shortfall: Has the meaning given in clause 4.26.1A.

Net STEM Refund: Has the meaning given in clause 4.26.3.

Net STEM Shortfall: Has the meaning given in clause 4.26.2.

Participant Forced Outage Refund: Has the meaning given in clause 4.26.1B.

4) Describe how the proposed Market Rule change would allow the Market Rules to better address the Wholesale Market Objectives:

Under the current rules, different Market Participants face different incentives in respect to addressing major Facility outages. This situation hinders the objective "to promote the economically efficient ... production and supply of electricity... ". This objective would also be hindered, though to a lesser extent, if overhead costs are increased due to an increase in the number of Market Participants, as a result of the current Rules favouring Market Participants with single plant portfolios.

By enhancing the efficiency of Market Participant operations, the proposed rule change would also support the Market Objective "to minimise the long-term cost of electricity supplied to customers from the South West interconnected system".

5) Provide any identifiable costs and benefits of the change:

The Wholesale Electricity Market Systems will need to be modified to accommodate this change.

The rule change will ensure that Market Participants are treated equitably with respect to their Reserve Capacity Refunds.