

## Wholesale Electricity Market Rule Change Proposal

Change Proposal No: RC\_2009\_07 Received date: 17 March 2009

### Submitted by

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Urgency:	Medium
Change Proposal title:	Under Construction for the Reserve Capacity Mechanism
Market Rule(s) affected:	4.2.7, 4.14.6 and Appendix 3

#### Introduction

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

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

### **Independent Market Operator**

Attn: Troy Forward, Manager Market Administration and System Capacity

PO Box 7096

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Fax: (08) 9254 4399

Email: marketadmin@imowa.com.au

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

The discussion paper should 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;



- (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.

### **Details of the proposed Market Rule Change**

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

A key objective for the Wholesale Electricity Market is to ensure that electricity is provided reliably as well as economically. This is a particularly significant issue in Western Australia because the electricity system is isolated and supplies cannot be drawn from neighbouring systems.

Reliability is achieved through the Reserve Capacity Mechanism (RCM). This is a set of processes through which the IMO determines the amount of generation and demand side management capacity required to meet future demand and facilitates the provision of this to the market.

The reliability of the SWIS depends on generators and DSM providers actually delivering the capacity that they have offered. The IMO undertakes a process of certification thorough which it satisfies itself that, among other things:

- The Facility will be able to deliver the quantity of capacity that is being offered; and
- If the Facility is yet to enter service, that it will be able to supply power into the SWIS by the date claimed.

Facilities that are certified may apply to the IMO for Capacity Credits. The IMO assigns Capacity Credits following the priority rules set out in Appendix 3 of the Market Rules. In assigning Capacity Credits to Facilities under the RCM, the IMO must make a determination of the status of a Facility. In the case of Facilities yet to enter service, a Facility may be in either *proposed* status or *under construction*. It has been found that the term *under construction* may not be optimal or broad enough for the full range of projects being considered or may be considered in the future.

*Under construction* implies the Facility is in the progress of physically being constructed. Facilities with short lead times may be constructed within 12 - 18 months, for example, and would not be under construction two years in advance of the start of the relevant Capacity Year when the IMO assigns Capacity Credits.

Another example is a Market Participant seeking Certified Reserve Capacity (CRC) and Capacity Credits for a Facility upgrade. Construction in this case is not necessarily required,



only the ability for the relevant Facility to complete the upgrade during planned maintenance periods. Although these Facilities are fully committed at the time of application and in all other ways able to qualify for Capacity Credit assignment, a broader definition of this class is warranted.

The IMO proposes to amend the Market Rules and replace the word *under construction* with *committed*. The assessment criteria to enable the IMO to determine whether a Facility is *committed* will be included in the Market Procedure for Declaration of Bilateral Trades and the Reserve Capacity Auction, given this it should still be noted that there are a number of factors the IMO will need to take into account when undertaking its assessment. The definition of *committed* (changes from the current definition of *under construction* are underlined) is proposed to be:

Factors which will be taken into consideration when assessing whether a project is 'Committed' include:

- Financial commitment by the Rule Participant to the primary equipment supplier. (This would usually take the form of a signed contract indicating purchase of the main plant equipment including penalty clauses associated with non-compliance of the purchase agreement).
  - Formal commitment, including financial approval, on behalf of the company in respect of the project, for example Board approval;
  - Details of planning, construction and environmental applications, approvals and licences;
  - Access to land either through ownership or an appropriate leasing agreement;
  - A signed contract for civil works (or appropriate alternative), including contractual delivery times, which indicate the construction phase has started; and
  - Where a facility is being built primarily to supply energy to one or more foundation customers, evidence that relevant power supply contracts are in place.

The change will help to remove any uncertainty around the order which offers for Capacity Credits relating to these projects will be accepted in Appendix 3 of the Market Rules.

### **Explain the reason for the degree of urgency:**

The proposed amendments need to be implemented before the application process for CRC closes in August 2009, so as to provide adequate signals to entrants within the RCM. The Standard Rule Change Process will be adequate to process this change.



- 1) 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)
- 4.2.7. By the date and time specified in clause 4.1.6, the IMO must publish the following information:
  - (a) the number of Expression of Interests received;
  - (b) based on the Expression of Interests, the additional Reserve Capacity potentially available, categorised as:
    - i. capacity associated with Facilities that are under construction committed; and
    - ii. capacity associated with Facilities that are yet to commence being constructed, where this capacity is to be further categorised between new Facilities for which:
      - an offer by the relevant Network Operator to enter into an Arrangement for Access ("Access Offer") has been made and all necessary Environmental Approvals granted;
      - applications for both Access Offers and Environmental Approvals have been made and one or both are being processed;
      - 3. no Access Offer has been applied for or some or all Environmental Approvals have not been applied for;

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- 4.14.6. If two or more Facilities cannot simultaneously exist (for example, because more than one Market Participant is proposing to build a Facility that will be located at the same site,) then the IMO cannot accept a non-zero value provided in accordance with clause 4.14.1(c) in respect of more than one of these Facilities and must reject all but one Facility based on the following criteria:
  - (a) Facilities that are operational or are under construction committed will be accepted ahead of other Facilities; then
  - (b) if more than one Facility remains, then Facilities that can demonstrate having secured financing will be accepted ahead of other Facilities; then
  - (c) if more than one Facility remains, then Facilities with the greatest quantity of Certified Reserve Capacity will be accepted ahead of Facilities with lower Certified Reserve Capacity; then

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# **Appendix 3: Reserve Capacity Auction & Trade Methodology**

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The algorithm is as follows:

Step 1: Start with a = 1

Step 2: Let the set of active offers comprise all offers from Availability Class "a".

Step 2A: In the case of bilateral trade offers, accept offers from operating facilities and committed facilities under construction and remove them from the set of active offers.

Step 3: Accept offers from the set of active offers in order of

- In the case of testing bilateral schedules, decreasing availability.
- In the case of the reserve capacity auction, increasing price

until the capacity requirements of Availability Class "a" are fully covered or until there are no offers left unaccepted in the set of active offers.

Where two or more offers are tied with respect to the selection criteria such that accepting all but one of them would result in the total capacity selected exceeding the total capacity requirement of the Availability Class then the tied offers are to be accepted according to the following rules until the tie is resolved.

- In the case of the reserve capacity auction, offers from operating facilities and <u>committed</u> facilities <u>under construction</u> are to be accepted ahead of facilities that are <u>not committed</u> yet to commence construction; then
- Offers are to be accepted in decreasing order of capacity offered; then
- Offers for capacity that was included in an Expression of Interest are to be accepted ahead of capacity that was not; then
- Offers are to be accepted in the order of the time the offers were received, with the earlier offer being taken first; and then
- Offers are to be accepted in the order the capacity secured Certified Reserve Capacity;

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Step 11: End.

In the case of the auction only:



- While leaving the Reserve Capacity Price unchanged, the IMO must exchange one or more offers not accepted for one or more offers accepted in the auction if
  - the total capacity scheduled in the auction exceeds the Reserve Capacity Auction Requirement by more than 100 MW;
  - the Reserve Capacity Price exceeds zero,
  - the exchange produces the maximum possible reduction in the total value of offers accepted;
  - the exchange does not create an overall Reserve Capacity shortfall where none existed;
  - in the event that a capacity shortfall exists in one or more
    Availability Classes, the exchange will not shift a shortfall from an
    Availability Class with low availability to an Availability Class with
    high availability; and
  - this would not result in an existing facility, or a <u>committed</u> facility under construction being excluded.

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

The IMO considers that the change will help the Market Rules to better address market objective (c):

(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;

By replacing the term *under construction* with *committed*, the proposal will allow committed projects with lead times of under two years (for which construction has not begun at the time of application) for example small diesel generators, to be assigned Capacity Credits under step 2A in Appendix 3 of the Market Rules.

The IMO considers that the proposal is consistent with the other market objectives.

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

The proposed amendments will improve the clarity of the Market Rules, and remove doubt about these provisions for Facilities which would progress with a high degree of confidence, but may not need to satisfy the under construction criteria. Additional benefits include an improved Reserve Capacity process, and bringing the definition in line with what is used in



the National Electricity Market. This will benefit both new participants and investors active in both markets.

The changes are of an administrative nature and should not require changes to the IMO systems.