



INDEPENDENT  
MARKET  
OPERATOR

## IMO Procedure Change and Development Working Group

### Agenda

<b>Meeting No.</b>	17
<b>Location:</b>	IMO Board Room Level 17, Governor Stirling Tower, 197 St Georges Terrace, Perth
<b>Date:</b>	01 May 2014
<b>Time:</b>	2.00 – 3.30 PM

Item	Subject	Responsible	Time
1.	WELCOME & APOLOGIES / ATTENDANCE	Chair	5 min
2.	MINUTES FROM PREVIOUS MEETING	Chair	5 min
3.	ACTIONS ARISING	Chair	5 min
4.	PC_2013_05: MARKET PROCEDURE FOR RESERVE CAPACITY SECURITY	IMO	30 min
5.	PC_2014_03: MARKET PROCEDURE FOR DETERMINING THE BENCHMARK RESERVE CAPACITY PRICE	IMO	30 min
6.	GENERAL BUSINESS	Chair	10 min
7.	NEXT MEETING: TBA	Chair	5 min

## Agenda item 2: 2014 IMO Procedure Change and Development WG Action Points

Legend:

<b>Shaded</b>	Shaded action points are actions that have been completed since the last IMOPWG meeting.
<b>Unshaded</b>	Unshaded action points are still being progressed.
<b>Missing</b>	Action items missing in sequence have been completed from previous meetings and subsequently removed from log.

#	Procedure Arising	Action	Status/Progress
107	N/A	When there is a long break between Working Group meetings, the minutes are to be ratified by email.	Ongoing.
138	Market Procedure for Notices and Communications	The IMO to update the Market Procedure for Notices and Communications to reflect the amendments agreed to at the 27 November 2012 meeting.	Underway.
149	Minutes of Meeting 16	The IMO to amend the minutes as required and publish on Market Web Site.	Complete
150	Market Procedure for Certification of Reserve Capacity	The IMO to update the Market Procedure for Certification of Reserve Capacity, taking into account the suggestions made and the amendments agreed to at the 6 February 2014 Working Group meeting and to submit the updated Market Procedure into the formal Procedure Change Process.	Complete

#	Procedure Arising	Action	Status/Progress
151	Market Procedure for Reserve Capacity Performance Monitoring	The IMO to update the Market Procedure for Reserve Capacity Performance Monitoring to reflect the amendments agreed to at the 6 February 2014 Working Group meeting and to submit the updated Market Procedure into the formal Procedure Change Process.	Complete
152	Market Procedure for Balancing Market Forecasts	The IMO to update step 2.7.1(c) of the Market Procedure for Balancing Market Forecasts taking into account suggestions made at the 6 February 2014 IMOPWG meeting and circulate the revised Market Procedure to IMOPWG members for feedback.	Underway
153	Market Procedure for Declaration of Bilateral Trades and Reserve Capacity Auction	The IMO to update the Market Procedure for Declaration of Bilateral Trades and Reserve Capacity Auction on the basis of feedback provided at the 6 February 2014 IMOPWG meeting and submit it into the formal Procedure Change Process.	Complete



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## Wholesale Electricity Market Procedure Change Proposal

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Procedure Change ID: PC\_2013\_05

### Change requested by

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<b>Address:</b>	Level 17, Governor Stirling Tower, 197 St. Georges Terrace, Perth
<b>Date submitted:</b>	DD Month 2014
<b>Urgency:</b>	2-medium
<b>Procedure change title:</b>	Changes to Market Procedure: Reserve Capacity Security
<b>Market Procedure(s) affected:</b>	Market Procedure: Reserve Capacity Security

### Introduction

The IMO or System Management, as applicable, may initiate the Procedure Change Process by developing a Procedure Change Proposal. Rule Participants may notify the IMO or System Management, as applicable, where they consider an amendment or replacement of a Market Procedure would be appropriate.

If an Amending Rule requires the IMO or System Management to develop new Market Procedures or to amend or replace existing Market Procedures, then the IMO or System Management, as applicable, is responsible for the development, amendment, or replacement of Market Procedures so as to comply with the Amending Rule.

Market Procedures:

- (a) must:
- i. be developed, amended or replaced in accordance with the process in the Wholesale Electricity Market (WEM) Rules (Market Rules);
  - ii. be consistent with the Wholesale Market Objectives;
  - iii. be consistent with the Electricity Industry Act, the Electricity Industry (Wholesale Electricity Market) Regulations and the Market Rules; and



- (b) may be amended or replaced in accordance with clause 2.10 of the Market Rules and must be amended or replaced in accordance with clause 2.10 where a change is required to maintain consistency with Amending Rules.

The Wholesale 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; 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 Procedure Change Requested

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### 1. Provide a reason for the proposed new, amended or replacement Market Procedure:

#### Background

The Market Procedure: Reserve Capacity Security (Market Procedure) provides further detail on issues related to the:

- (a) determination and notification of the requirement for Reserve Capacity Security;
- (b) arrangements for Market Participant's to provide Reserve Capacity Security;
- (c) assessing Reserve Capacity Security arrangements;
- (d) maintenance and replacement of Reserve Capacity Security;
- (e) conditions that must be fulfilled for the return of Reserve Capacity Security; and
- (f) application of monies drawn upon from Reserve Capacity Security.

The IMO developed the Rule Change Proposal: Prudential Requirements (RC\_2012\_23<sup>1</sup>) where certain amendments are proposed to clauses 4.13.1, 4.13.2C, 4.13.3, 4.13.4 and 4.13.5 of the Market Rules that outline the obligations for Market Participants and the IMO with respect to the provision, maintenance and replacement of Reserve Capacity Security. The IMO has developed this Procedure Change Proposal to propose amendments to the Market Procedure to ensure consistency with the Amending Rules in RC\_2012\_23 that are proposed to commence on 1 May 2014.

It should be noted that the IMO has applied the latest IMO template and styles to the Market Procedure. As a result, a marked-up version of the Market Procedure has not been provided.

## **Proposed Amendments**

The key areas of the Market Procedure that the IMO proposes to amend are discussed below.

### **1. Reserve Capacity Security Arrangements**

In RC\_2012\_23, the IMO proposed amendments to clauses 4.13.1, 4.13.2C, 4.13.3, 4.13.4 and 4.13.5 of the Market Rules to:

- (a) provide greater clarity to Market Participants with respect to their obligations to provide and maintain the required amount of Reserve Capacity Security; and
- (b) retain the principles in the Market Rules and move the prescriptive detail in relation to timelines for providing Reserve Capacity Security and circumstances which may necessitate replacement Reserve Capacity Security, into the Market Procedure.

As a result, the IMO proposes to amend sections 5, 6 and 7 of the Market Procedure to provide further detail in relation to the processes to be followed by Market Participants and the IMO to ensure that adequate Reserve Capacity Security is provided and maintained.

It should be noted that the procedure steps related to Reserve Capacity Security arrangements are similar to those related to Credit Support arrangements. The IMO proposed amendments to the steps related to Credit Support arrangements in the Market Procedure: Prudential Requirements in the Procedure Change Proposal: Changes to the Market Procedure for Prudential Requirements (PC\_2013\_04<sup>2</sup>). To the extent the steps are similar between this Market Procedure and the Market Procedure: Prudential Requirements, the IMO has used consistent language throughout both Market Procedures.

### **2. Acceptable Credit Criteria**

The IMO also reviewed the obligations related to Acceptable Credit Criteria in PC\_2013\_04, resulting in amendments to step 4.1 of the Market Procedure: Prudential Requirements.

As obligations related to Acceptable Credit Criteria are the same for Reserve Capacity Security arrangements, the IMO proposes to amend section 5.5 of this Market Procedure to

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<sup>1</sup> Available at: [http://www.imowa.com.au/RC\\_2012\\_23](http://www.imowa.com.au/RC_2012_23)

<sup>2</sup> Available at: [http://www.imowa.com.au/PC\\_2013\\_04](http://www.imowa.com.au/PC_2013_04). The revised amended Market Procedure: Prudential Requirements is due to commence on 1 May 2014 together with the Amending Rules in RC\_2012\_23.

require Market Participants to follow the obligations outlined in step 4.1 of the Market Procedure: Prudential Requirements.

Further, the IMO proposes to remove the steps that expand upon the IMO's obligations in relation to maintaining the list of entities meeting the Acceptable Credit Criteria (as outlined in clauses 2.38.7, 2.38.8 and 2.38.9 of the Market Rules) from the Market Procedure: Reserve Capacity Security because the head of power (clause 4.13.8 of the Market Rules) does not provide for it. The IMO considers that its obligations around maintaining the list of entities that meet the Acceptable Credit Criteria are more appropriately addressed in step 4.2 of the Market Procedure: Prudential Requirements.

### 3. Other Amendments

The IMO has also taken the opportunity to update this Market Procedure to:

- (a) improve its readability and usability;
- (b) include Market Rule references where relevant.
- (c) to reflect the latest IMO format and style.

### Call for Submissions

The IMO is seeking submissions regarding this proposal. The submission period is 20 Business Days from the publication of this Procedure Change Proposal. Submissions must be delivered to the IMO by **5:00 PM** on **Day, DD Month 2014**.

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

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

**Independent Market Operator**  
Attn: Group Manager, Development & Capacity  
PO Box 7096  
Cloisters Square, Perth WA 6850  
Fax: (08) 9254 4399

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## 2. Provide the wording of the amended Procedure

The proposed amended Market Procedure is provided as an attachment to this proposal.

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**3. Describe how the proposed changes to the Market Procedure would be consistent with the Market Rules, the Electricity Industry Act and Regulations**

The proposed amended Market Procedure has been reviewed as a whole by the IMO to ensure compliance of the Market Procedure with the relevant provisions in the:

- Electricity Industry Act;
- Regulations; and
- Market Rules.

**4. Describe how the proposed changes to the Market Procedure would be consistent with the Wholesale Market Objectives**

The steps described in the proposed amended Market Procedure will facilitate the Reserve Capacity Security obligations to be met by Market Participants and the IMO as described in clause 4.13 of the Market Rules. Specifically, the IMO considers that the proposed amendments to the Market Procedure:

- (a) support the operation of the Amending Rules in RC\_2012\_23, which better achieve Wholesale Market Objectives (a) and (b); and
- (b) document the current process and obligations thereby improving transparency; and
- (c) enhance the overall readability and usability of the Market Procedure.

For these reasons, the IMO considers that the proposed amended Market Procedure, as a whole, is consistent with the Wholesale Market Objectives.

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**Procedure Change ID:** PC\_2013\_05

**Received Date:** DD Month 2014



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# MARKET PROCEDURE: RESERVE CAPACITY SECURITY

Version 3



ELECTRICITY INDUSTRY ACT 2004  
ELECTRICITY INDUSTRY  
(WHOLESALE ELECTRICITY MARKET)  
REGULATIONS 2004  
WHOLESALE ELECTRICITY MARKET RULES  
COMMENCEMENT:

This Market Procedure took effect from 8:00am (WST) on the same date as the Wholesale Electricity Market Rules.

**VERSION HISTORY**

Version	Effective Date	Notes
1	24 July 2009	Market Procedure for Reserve Capacity Security
2	2 April 2012	Amendments to Market Procedure resulting from PC_2012_01
3	<b>DD Month</b> 2013	Amendments to Market Procedure resulting from PC_2013_05

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# 1 PROCEDURE OVERVIEW

## 1.1 Relationship with the Market Rules

- 1.1.1 This Market Procedure: Reserve Capacity Security (Procedure) is made in accordance with clause 4.13.8 of the Wholesale Electricity Market (WEM) Rules (Market Rules).
- 1.1.2 Reference to particular Market Rules within the Procedure, which are in bold and square brackets **[Clause XX]** are current as of **DD Month 2014**. These references are included for convenience only and are not part of this Procedure.
- 1.1.3 The IMO may modify or extend a date or time set under section 4.1 of the Market Rules (except the dates and times set by clauses 4.1.18, 4.1.26, 4.1.29 and 4.1.30) in accordance with the requirements outlined in clause 4.1.32.

## 1.2 Purpose of this Procedure

- 1.2.1 This Procedure outlines the processes for dealing with:
- (a) determining the initial and ongoing requirement for and the value of Reserve Capacity Security for a Facility;
  - (b) assessing persons against the Acceptable Credit Criteria;
  - (c) Reserve Capacity Security arrangements, including:
    - i. the form of acceptable guarantees and bank undertakings;
    - ii. where and how the IMO will hold cash deposits and how the costs and fees for holding cash deposits will be met; and
    - iii. the application of monies drawn upon from Reserve Capacity Security in respect to amounts payable by the relevant Market Participant to the IMO under clause 4.13.11A of the Market Rules; and
  - (d) other matters relating to clause 4.13 of the Market Rules.

## 1.3 Application of this Procedure

- 1.3.1 In this Procedure, where obligations are conferred on a Rule Participant, that Rule Participant must comply with the relevant obligations in accordance with clauses 2.9.6, 2.9.7 and 2.9.8 of the Market Rules, as applicable.

## 1.4 Associated Market Procedures and Market Documents

- 1.4.1 The following Market Procedures are associated with this Procedure:
- (a) Certification of Reserve Capacity;
  - (b) Declaration of Bilateral Trades and the Reserve Capacity Auction;
  - (c) Reserve Capacity Testing;
  - (d) Reserve Capacity Performance Monitoring; and
  - (e) Prudential Requirements.
- 1.4.2 The following market documents available on the Market Web Site, are associated with this Procedure:
- (a) Proforma deeds for:
    - i. Bank undertaking for Reserve Capacity Security;
    - ii. Guarantee for Reserve Capacity Security;

- iii. Security Deposit for Reserve Capacity Security;
- iv. Security Deposit for Reserve Capacity Security (provided by third party);
- (b) Change of contact details form;
- (c) Contact details of guarantee/bank undertakings form;
- (d) Security Deposit instructions;
- (e) Acceptable Credit Criteria form;
- (f) List of entities meeting the Acceptable Credit Criteria; and
- (e) Progress Report required under clause 4.27.10 of the Market Rules.

## 1.5 Conventions Used

1.5.1 In this Procedure the conventions specified in clauses 1.3 to 1.5 of the Market Rules apply.

1.5.2 The appendices, if any, contained within this Procedure form part of the Procedure and are legally enforceable.

## 1.6 Terminologies and Definitions

1.6.1 A word or phrase defined in the Electricity Industry Act (the Act), the Electricity Industry (Wholesale Electricity Market) Regulations (Regulations) or the Market Rules has the same meaning when used in this Procedure. In addition, the following defined terms have the meanings detailed below.

**Table 1 – Defined Terms**

Term	Definition
<b>Compliance Date</b>	The date by which the Market Participant must comply with its obligations under clause 4.13.11 of the Market Rules, being 30 November of Year 4 of the relevant Reserve Capacity Cycle.
<b>Commercial Operation</b>	The status determined by the IMO for a Facility under clause 4.13.10B of the Market Rules.
<b>Due Date</b>	The date specified by the IMO in respect of a step in this Procedure.
<b>Ninety Percent Test</b>	A set of conditions that a Market Participant must meet to be eligible for the return of its Reserve Capacity Security, as defined in step 8.1 of this Procedure.
<b>NMI</b>	Means the unique identifier assigned to a connection point, as defined in section 1.3 of the <i>Electricity Industry (Metering) Code 2012</i>
<b>Nominated Exchange Date</b>	The date agreed upon by a Market Participant and the IMO on which the IMO will return any excess Reserve Capacity Security in exchange for a duly effective replacement Reserve Capacity Security provided by the Market Participant.
<b>One Hundred Percent Test</b>	A set of conditions that a Market Participant must meet to be eligible for the return of its Reserve Capacity Security, as defined in step 8.2 of this Procedure.

Term	Definition
<b>Reserve Capacity Security Due Date</b>	The date and time specified in clause 4.1.13 of the Market Rules for Certified Reserve Capacity and clause 4.28C.8 for Early Certified Reserve Capacity and reproduced in Table 2 of this Procedure.
<b>Temperature Dependence Curve</b>	The information provided by a Market Participant under clause 4.10.1(e)(i) of the Market Rules, as detailed in the manufacturer's technical specifications or as determined by an independent engineering firm.
<b>Treasury Corporation</b>	A central borrowing authority of an Australian State or Territory, which authority has been established by an Act of Parliament of that State or Territory.

## 1.7 Amendments to Proforma Documents

- 1.7.1 The IMO may, in its absolute discretion, amend and publish on the Market Web Site any market documents listed in step 1.4.2 of this Procedure.
- 1.7.2 A Market Participant wishing to use any market document listed in step 1.4.2 of this Procedure must ensure that it downloads the current version from the Market Web Site.
- 1.7.3 If the IMO amends and publishes a market document prior to a Market Participant's provision of Reserve Capacity Security under this Procedure, the IMO must apply the amended and published version of that market document to assess compliance of the Reserve Capacity Security.

## 2 REQUIREMENT FOR RESERVE CAPACITY SECURITY

### 2.1 Conditions under which a Market Participant is Required to Provide Reserve Capacity Security

- 2.1.1 Where the IMO assigns Certified Reserve Capacity to a Facility in a Reserve Capacity Cycle, then the relevant Market Participant for that Facility must provide Reserve Capacity Security if any of the following apply:
- (a) the Facility is yet to enter service; or
  - (b) subject to step 2.1.2 of this Procedure, the Facility is an existing Facility that has undergone significant maintenance or has been upgraded **[Clause 4.13.1]**; or
  - (c) the IMO cancelled the Capacity Credits assigned to the Facility for the previous Reserve Capacity Cycle in accordance with clause 4.20.14 of the Market Rules **[Clause 4.13.1B(b)]**.
- 2.1.2 For the purpose of step 2.1.1(b) of this Procedure, where the Facility is an existing Facility that has undergone significant maintenance or has been upgraded, the requirement to provide Reserve Capacity Security applies only to the part of the Facility that was significantly maintained or upgraded **[Clause 4.13.1A]**.
- 2.1.3 For the purpose of clause 4.13.1 of the Market Rules and step 2.1.2 of this Procedure, the IMO will deem a Facility to be undergoing 'significant maintenance' if, in the IMO's opinion, the scope and duration of works represent a risk for the late or failed return to service of the Facility, similar to that for a new Facility.
- 2.1.4 For the purpose of clause 4.13.1 of the Market Rules and step 2.1.2 of this Procedure, the IMO will deem a Facility to be undergoing an 'upgrade' if it has

been assigned a higher level of Certified Reserve Capacity than during the previous Reserve Capacity Cycle as a result of works to be undertaken or already undertaken on the Facility, where the higher level of Certified Reserve Capacity has not been demonstrated by the Facility in the current Capacity Year.

**2.2 Conditions under which a Market Participant is Not Required to Provide Reserve Capacity Security**

2.2.1 Where a Market Participant has provided Reserve Capacity Security for the same Facility in a previous Reserve Capacity Cycle and the following conditions are met:

- (a) the Facility has not undergone significant maintenance or upgrades; and
- (b) the IMO has not cancelled the Facility’s Capacity Credits in the previous Reserve Capacity Cycle,

then the Market Participant is not required to provide Reserve Capacity Security for that Facility [**Clause 4.13.1B**].

**Table 2 – Summary of the Requirement for Reserve Capacity Security**

Scenarios under which Market Participant is required to provide Reserve Capacity Security	The amount of Reserve Capacity Security to be provided	Reserve Capacity Security Due Date	How to provide Reserve Capacity Security
The Facility was assigned Certified Reserve Capacity under clause 4.11 of the Market Rules and the conditions under step 2.1 of this Procedure are met	As calculated under clause 4.13.2(a) of the Market Rules	As specified in clause 4.1.13(b) of the Market Rules and step 3.1.1(c) of this Procedure	Refer to section 5 of this Procedure
The Facility was assigned Conditional Certified Reserve Capacity under clause 4.9.5 of the Market Rules and the conditions under step 2.1 of this Procedure are met	As calculated under clause 4.13.2(a) followed by confirmation under clause 4.9.5(c) of the Market Rules	As specified in clause 4.1.13(b) of the Market Rules and step 3.2.1(c) of this Procedure	
The Facility was assigned Early Certified Reserve Capacity under clause 4.28C of the Market Rules and the conditions under step 2.1 of this Procedure are met	As calculated under clause 4.28C.9 of the Market Rules	In accordance with clause 4.28C.8 of the Market Rules, 30 days from the date the Market Participant receives the IMO’s notification under step 3.3.1 of this Procedure	

### **3 THE IMO'S NOTIFICATION OF THE REQUIREMENT FOR RESERVE CAPACITY SECURITY**

#### **3.1 Certified Reserve Capacity**

3.1.1 Where the IMO assigns Certified Reserve Capacity to a Facility under clause 4.11 of the Market Rules for a Reserve Capacity Cycle, the IMO must notify the relevant Market Participant in writing by 5:00 PM on the last Business Day on or before 19 August of Year 1 of the Reserve Capacity Cycle [**Clause 4.1.12(b)**], of:

- (a) whether any Reserve Capacity Security is required as a condition of the Market Participant holding the Certified Reserve Capacity, as determined under section 2 of this Procedure;
- (b) the amount of Reserve Capacity Security calculated in accordance with clause 4.13.2(a) of the Market Rules, if applicable [**Clause 4.9.9(c)**]; and
- (c) the Reserve Capacity Security Due Date by which the Market Participant must provide duly effective Reserve Capacity Security. The Reserve Capacity Due Date is no later than 5:00 PM of the last Business Day which falls on or before [**Clause 4.1.13(b)**]:
  - i. 2 September of Year 1 of the relevant Reserve Capacity Cycle, if any of the Facility's Certified Reserve Capacity is to be traded bilaterally in accordance with clause 4.14.1(c) of the Market Rules or if the Facility is subject to a Network Control Service Contract; or
  - ii. 14 September of Year 1 of the relevant Reserve Capacity Cycle, if any of the Facility's Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) of the Market Rules and where none of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c) of the Market Rules.

#### **3.2 Conditional Certified Reserve Capacity**

3.2.1 Where the IMO assigns Conditional Certified Reserve Capacity to a Facility under clause 4.9.5 of the Market Rules for a future Reserve Capacity Cycle, the IMO must notify the relevant Market Participant in writing within 90 days of receiving the application [**Clause 4.9.8(b)**], of:

- (a) whether any Reserve Capacity Security is required as a condition of the Market Participant holding the Conditional Certified Reserve Capacity, as determined under section 2 of this Procedure;
- (b) the amount of Reserve Capacity Security determined in accordance with clause 4.13.2(a) and confirmed in accordance with 4.9.5(c) of the Market Rules, if applicable [**Clause 4.9.9(c)**]; and
- (c) the Reserve Capacity Security Due Date by which the Market Participant must provide duly effective Reserve Capacity Security. The Reserve Capacity Due Date is no later than 5:00 PM of the last Business Day which falls on or before [**Clause 4.1.13(b)**]:
  - i. 2 September of Year 1 of the relevant Reserve Capacity Cycle, if any of the Facility's Certified Reserve Capacity is to be traded bilaterally in accordance with clause 4.14.1(c) of the Market Rules or if the Facility is subject to a Network Control Service Contract; or
  - ii. 14 September of Year 1 of the relevant Reserve Capacity Cycle, if any of the Facility's Certified Reserve Capacity is specified to be offered

into the Reserve Capacity Auction in accordance with clause 4.14.1(a) of the Market Rules and where none of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c) of the Market Rules.

### **3.3 Early Certified Reserve Capacity**

3.3.1 Where the IMO assigns Early Certified Reserve Capacity to a Facility under clause 4.28C of the Market Rules for a future Reserve Capacity Cycle, the IMO must notify the relevant Market Participant in writing within 90 days of receiving the application **[Clause 4.28C.7]**, of:

- (a) whether any Reserve Capacity Security required as a condition of the Market Participant holding the Early Certified Reserve Capacity, as determined under section 2 of this Procedure;
- (b) the amount of Reserve Capacity Security determined in accordance with clause 4.28C.9, if applicable; and
- (c) the Reserve Capacity Security Due Date by which the Market Participant must provide duly effective Reserve Capacity Security. The Reserve Capacity Security Due Date is 30 days from the date the Market Participant receives the IMO's notification under this step 3.3.1 **[Clause 4.28C.8]**.

## **4 RECALCULATION OF THE AMOUNT OF RESERVE CAPACITY SECURITY TO BE PROVIDED**

### **4.1 Timeline for the Recalculation of the Amount of Reserve Capacity Security to be Provided**

4.1.1 A Market Participant may apply to the IMO for recalculation<sup>1</sup> of the amount of Reserve Capacity Security required to be held by the IMO for a Facility **[Clause 4.13.2A]** after 5:00 PM on the last Business Day falling on or before 24 September of Year 1 of the Reserve Capacity Cycle **[Clause 4.1.21]**.

4.1.2 Where a Market Participant applied for Early Certified Reserve Capacity, the IMO must recalculate the amount of Reserve Capacity Security to be provided for its Facility **[Clauses 4.28C.12]** before 5:00 PM on the last Business Day falling on or before:

- (a) 2 September of Year 1 of the Reserve Capacity Cycle in which the Facility will enter service (as advised under clause 4.10.1(b) of the Market Rules), if any of the Facility's Early Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.4(c) or if the Facility is subject to a Network Control Service Contract; or
- (b) 14 September of Year 1 of the Reserve Capacity Cycle in which the Facility will enter service (as advised under clause 4.10.1(b) of the Market Rules), if any of the Facility's Early Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.4(a) and none of its Early Certified Reserve Capacity will be traded bilaterally **[Clause 4.1.13(b)]**.

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<sup>1</sup> For example, in situations where the number of Capacity Credits is less than the quantity of Certified Reserve Capacity.

## **4.2 The IMO's Process for Recalculation of the Amount of Reserve Capacity Security**

- 4.2.1 Within 10 Business Days of receiving a request from a Market Participant under step 4.1.1 of this Procedure, the IMO must recalculate the amount of the Reserve Capacity Security required to be held for a Facility using the formula in clause 4.13.2(b) of the Market Rules **[Clause 4.13.2B]**.
- 4.2.2 If the recalculated amount under step 4.2.1 of this Procedure is the same as the original amount of Reserve Capacity Security determined using the formula in clause 4.13.2(a) of the Market Rules, then the IMO must notify the Market Participant in writing of no change in status within 10 Business Days of receiving the request under step 4.1.1 of this Procedure.
- 4.2.3 If the recalculated amount under step 4.2.1 of this Procedure is less than the original amount of Reserve Capacity Security determined using the formula in clause 4.13.2(a) of the Market Rules, then the IMO must do the following within 10 Business Days of receiving the request under step 4.1.1 of this Procedure:
- (a) notify the Market Participant in writing of the result of the calculation **[Clause 4.13.2B(a)]**;
  - (b) offer the Market Participant in writing the opportunity to replace the Reserve Capacity Security arrangement in accordance with clause 4.13.2C of the Market Rules and step 7.1 of this Procedure **[Clause 4.13.2B(b)]**; and
  - (c) return the excess Reserve Capacity Security if the Market Participant provides a replacement Reserve Capacity Security arrangement under step 4.2.3(b) of this Procedure **[Clause 4.13.2B(c)]**.
- 4.2.4 Where a Market Participant receives the IMO's notification under step 4.2.3 of this Procedure that excess Reserve Capacity Security is held by the IMO and elects to replace its Reserve Capacity Security, the Market Participant must do so in accordance with step 7.1 of this Procedure.
- 4.2.5 Where under step 4.1.2 of this Procedure, the IMO is recalculating the Reserve Capacity Security for a Facility that holds Early Certified Reserve Capacity, the IMO must recalculate the amount of Reserve Capacity Security required to be held for that Facility using the formula in clause 4.28C.9 of the Market Rules **[Clause 4.28C.12]**.
- 4.2.6 If the recalculated amount under step 4.2.5 of this Procedure is more than the original amount of Reserve Capacity Security determined using the formula in clause 4.28C.9 of the Market Rules, then the IMO must notify the Market Participant in writing that additional Reserve Capacity Security is required to be provided by the date and time specified in clause 4.1.13 of the Market Rules **[Clause 4.28C.12(a)]**.
- 4.2.7 Where a Market Participant receives the IMO's notification under step 4.2.6 of this Procedure that additional Reserve Capacity Security is required, the Market Participant must provide the additional Reserve Capacity Security in accordance with section 5 of this Procedure.
- 4.2.8 If the recalculated amount under step 4.2.5 of this Procedure is less than the original amount of Reserve Capacity Security determined using the formula in clause 4.28C.9 of the Market Rules, then the IMO must do the following by the date and time outlined in step 4.1.2 of this Procedure:
- (a) notify the Market Participant in writing of the result of the calculation; and
  - (b) offer to return the excess Reserve Capacity Security in accordance with clause 4.13.14 of the Market Rules **[Clause 4.28C.12(b)]**.

- 4.2.9 Where a Market Participant receives the IMO's notification under step 4.2.8 of this Procedure that excess Reserve Capacity Security is held by the IMO, the Market Participant may request the IMO in writing to return the excess Reserve Capacity Security and step 7.1 of this Procedure becomes applicable [**Clause 4.28C.12(b)**].

## **5 PROVISION OF RESERVE CAPACITY SECURITY**

### **5.1 Reserve Capacity Security Arrangements**

- 5.1.1 A Market Participant that is required to provide Reserve Capacity Security must ensure that its Reserve Capacity Security arrangement meets the requirements of clause 4.13.5 of the Market Rules [**Clause 4.13.1(a)**].
- 5.1.2 A Market Participant must provide Reserve Capacity Security in the form of either a:
- (a) guarantee or bank undertaking, in accordance with the process detailed in step 5.3 of this Procedure and in accordance with clause 4.13.5(a) of the Market Rules; or
  - (b) Security Deposit in accordance with the process detailed in step 5.4 of this Procedure and clause 4.13.5(b) of the Market Rules, if the IMO in its discretion has agreed to accept a Security Deposit and the Security Deposit is made on terms acceptable to the IMO.
- 5.1.3 A Market Participant must ensure that the contact details it submits for its Reserve Capacity Security arrangements are current at all times. This includes contact details for persons at the Treasury Corporation or the bank to be provided in the contact details of guarantee/bank undertakings form. The Market Participant must update these contact details by completing the change of contact details form and emailing it to [accounts@imowa.com.au](mailto:accounts@imowa.com.au).
- 5.1.4 A Market Participant must ensure that the Reserve Capacity Security arrangement provided under step 5.1.2 of this Procedure does not have a specified end date which is prior to the Compliance Date.

### **5.2 Failure to Provide Reserve Capacity Security**

- 5.2.1 For a Facility that was assigned Certified Reserve Capacity (conditional or otherwise) under clauses 4.11 or 4.9.5 of the Market Rules and the conditions to provide Reserve Capacity Security under step 2.1 of this Procedure were met, if the Market Participant in respect of that Facility fails to provide the required amount of Reserve Capacity Security by the Reserve Capacity Due Date (as applicable), the Certified Reserve Capacity assigned to that Facility will lapse [**Clause 4.13.9**].
- 5.2.2 For a Facility that was assigned Early Certified Reserve Capacity under clause 4.28C of the Market Rules and the conditions to provide Reserve Capacity Security under step 2.1 of this Procedure were met, if the Market Participant in respect of that Facility fails to provide the required amount of Reserve Capacity Security by the Reserve Capacity Due Date (as applicable), the Early Certified Reserve Capacity assigned to that Facility will lapse [**Clause 4.28C.8A**].
- 5.2.3 Where the Certified Reserve Capacity assigned to a Facility lapses due to non-provision of Reserve Capacity Security, the IMO must notify the Market Participant in relation to that Facility, in writing as soon as practicable, that for the relevant Reserve Capacity Cycle:
- (a) the Certified Reserve Capacity has lapsed; and
  - (b) the Facility will not be assigned any Capacity Credits.

### **5.3 Submitting Guarantees or Bank Undertakings**

- 5.3.1 On receiving the IMO's notification to provide Reserve Capacity Security in steps 3.1.1, 3.2.1 or 3.3.1 of this Procedure as applicable, a Market Participant must download a copy of the following documents from the Market Web Site:
- (a) proforma deed for a guarantee or bank undertaking, as applicable; and
  - (b) Acceptable Credit Criteria form (this is required if the Treasury Corporation or bank is not on the list of entities meeting the Acceptable Credit Criteria, as published on the Market Web Site).
- 5.3.2 A Market Participant must then submit to the IMO a signed original hard copy of:
- (a) the proforma deed for guarantee or bank undertaking, as applicable, which:
    - i. is for the most recently calculated Reserve Capacity Security amount under clauses 4.13.2(a), 4.13.2(b) or 4.28C.9 (for Early Certified Reserve Capacity) as applicable;
    - ii. is in the form approved by the IMO and published on the Market Web Site; and
    - iii. has been executed by a Treasury Corporation (in the case of a guarantee) or a bank (in the case of a bank undertaking), that meets the Acceptable Credit Criteria; and
  - (b) the Acceptable Credit Criteria form for the Reserve Capacity Security provider (if applicable), completed in accordance with step 5.5 of this Procedure.
- 5.3.3 The IMO must not accept a proforma deed that does not meet the criteria in step 5.3.2(a) of this Procedure.
- 5.3.4 At the same time as providing the guarantee or bank undertaking to the IMO, a Market Participant must also provide to the IMO:
- (a) a completed contact details of guarantee/bank undertakings form which provides the contact details of at least two individuals representing the Market Participant and two individuals representing the Treasury Corporation or bank for the IMO to contact when drawing upon its Reserve Capacity Security; and
  - (b) any procedure that the Treasury Corporation or bank requires the IMO to follow when drawing upon the Reserve Capacity Security.
- 5.3.5 The Market Participant must provide a hard copy of the guarantee or bank undertaking to the IMO either in person or by courier or registered mail, requiring a signature on receipt.

### **5.4 Submitting Security Deposits**

- 5.4.1 On receiving the IMO's notification to provide Reserve Capacity Security in steps 3.1.1, 3.2.1 or 3.3.1 of this Procedure, a Market Participant providing a Security Deposit as a Reserve Capacity Security arrangement must request the IMO's agreement to accept the Security Deposit in writing.
- 5.4.2 Upon receiving the request under step 5.4.1 of this Procedure, the IMO must notify the Market Participant in writing whether a Security Deposit is an acceptable alternative and the terms under which the Security Deposit deed will be acceptable to the IMO.
- 5.4.3 If the IMO has notified the Market Participant under step 5.4.2 that a Security Deposit is not acceptable, then the Market Participant must provide Reserve

Capacity Security in the form of a guarantee or bank undertaking, as specified in step 5.3 of this Procedure.

- 5.4.4 If the IMO has notified the Market Participant under step 5.4.2 that a Security Deposit is acceptable, then the Market Participant must download a copy of the following documents from the Market Web Site:
- (a) proforma deed for Security Deposit for Reserve Capacity Security or proforma deed for Security Deposit for Reserve Capacity Security (provided by third party) as applicable; and
  - (b) Security Deposit instructions.
- 5.4.5 A Market Participant must then submit a signed original hard copy of the completed Security Deposit deed to the IMO which:
- (a) is in the form approved by the IMO and published on the Market Web Site; and
  - (b) has been executed by or on behalf of the Market Participant.
- 5.4.6 The IMO must not accept a proforma deed that does not meet the criteria in step 5.4.5 of this Procedure.
- 5.4.7 A Market Participant providing Reserve Capacity Security in the form of a Security Deposit must provide the amount of the Reserve Capacity Security in cleared funds by 5:00 PM on the date on which the accompanying Security Deposit deed is made, in accordance with the Security Deposit instructions.
- 5.4.8 The Market Participant must provide a hard copy of the Security Deposit deed to the IMO either in person or by courier or registered mail, requiring a signature on receipt.
- 5.4.9 The IMO must sign the original of the Security Deposit deed and return a copy of the signed original to the Market Participant.

## **5.5 Completing the Acceptable Credit Criteria Form**

- 5.5.1 Where a Market Participant provides a Reserve Capacity Security in the form of a guarantee or bank undertaking and the Reserve Capacity Security provider is not included on the current list of entities meeting the Acceptable Credit Criteria, the Market Participant must arrange for the completion of an Acceptable Credit Criteria form, providing evidence that the entity providing the Reserve Capacity Security meets the Acceptable Credit Criteria outlined in clause 2.38.6 of the Market Rules.
- 5.5.2 A Market Participant required to complete the Acceptable Credit Criteria form under step 5.5.1 of this Procedure must do so in accordance with step 4.1 of the Market Procedure: Prudential Requirements.
- 5.5.3 For the purposes of this Procedure, all occurrences of Credit Support in step 4.1 of the Market Procedure: Prudential Requirements must be read as Reserve Capacity Security.

## **5.6 The IMO's Process of Reviewing Reserve Capacity Security Arrangements**

- 5.6.1 On receiving completed documentation for Reserve Capacity Security from a Market Participant, the IMO must review the Reserve Capacity Security arrangement to:
- (a) determine whether it is compliant with clause 4.13.5(a) of the Market Rules and step 5.3 of this Procedure, if the arrangement is in the form of a guarantee or bank undertaking; or

- (b) determine whether it is compliant with the terms determined by the IMO under clause 4.13.5(b) of the Market Rules and step 5.4 of this Procedure, if the arrangement is in the form of a Security Deposit.
- 5.6.2 The IMO may at its discretion, request more information from the Market Participant to support its Reserve Capacity Security arrangement, by a Due Date determined by the IMO. The Market Participant must provide the relevant information by that Due Date.
- 5.6.3 Within five Business Days of the later of the dates on which the IMO receives completed documents under steps 5.6.1 and 5.6.2 of this Procedure, the IMO must notify the Market Participant in writing that the Reserve Capacity Security arrangement is either:
  - (a) compliant with the Market Rules and this Procedure; or
  - (b) not compliant with the Market Rules and/or this Procedure and provide reasons as to why the Reserve Capacity Security is not compliant.
- 5.6.4 If a Market Participant receives a notification of non-compliance under step 5.6.3(b) of this Procedure, the Market Participant must re-submit a Reserve Capacity Security arrangement that is compliant with clause 4.13.5 of the Market Rules and step 5.1 of this Procedure.

## **5.7 Further Steps by the IMO with respect to Reserve Capacity Security Arrangements**

- 5.7.1 Where the Reserve Capacity Security arrangement is a guarantee or bank undertaking, then at the same time as the IMO issues notice of compliance to the Market Participant in step 5.6.3(a) of this Procedure, the IMO must also notify the Treasury Corporation or the bank, as applicable, in writing, that the arrangement has been provided in accordance with clause 4.13.5(a) of the Market Rules and this Procedure.
- 5.7.2 After the IMO notifies the Market Participant and the Treasury Corporation or the bank, as applicable, in step 5.7.1 of this Procedure, the IMO must place the completed guarantee or bank undertaking in a bank safe box, as soon as practicable.
- 5.7.3 Where the Reserve Capacity Security arrangement is provided as a Security Deposit, then within 10 Business Days of cleared funds having been received by the IMO, the IMO must complete the process for registration of the security interest on the Personal Property Securities Register in accordance with the *Personal Property Securities Act 2009* (Cth)<sup>2</sup>. As part of this process the IMO must deduct any fees incurred in registering the security interests from the balance of the Security Deposit and send a notice of the verification statement containing the

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<sup>2</sup> The *Personal Property Securities Act 2009* (Cth) enables any person to register its security interests on the Personal Property Securities Register (Register). The Register is a real-time electronic notice board which allows individuals and organisations to search and register security interests in personal property (see <http://www.ppsr.gov.au/Pages/ppsar.aspx> for more information). For the purposes of the Act, any cash in a bank account (Security Deposit) under the control of the IMO pursuant to a Security Deposit deed that is provided to the IMO for the purposes of Credit Support (clause 2.38.4(b) of the Market Rules) or Reserve Capacity Security (clause 4.13.5(b) of the Market Rules), is a form of 'personal property'. The IMO's interest in the Security Deposit is a 'security interest', and the Security Deposit deed secures payment and performance obligations of a Market Participant.

details of the registration to the Credit Support provider and the Market Participant, as soon as practicable.

- 5.7.4 Upon completion of step 5.7.3 of this Procedure, the IMO must place the completed Security Deposit deed in a bank safe box, as soon as practicable.

## **5.8 Holding Security Deposits and Associated Costs**

- 5.8.1 Where the IMO receives Reserve Capacity Security in the form of a Security Deposit, it must:

- (a) invest any Security Deposit payments on behalf of the relevant Market Participant; and
- (b) maintain individual accounts for Security Deposits separate from any IMO operating funds accounts.

- 5.8.2 The IMO must credit the interest earned daily at the IMO Deposit Rate on the balance of the Security Deposit to the relevant Market Participant's bank account on a monthly basis and deduct any costs and fees associated with holding the Security Deposit from the balance of the Security Deposit, including bank fees and charges **[Clause 4.13.6]**.

- 5.8.3 The IMO may provide written advice to a Market Participant on a monthly basis regarding the interest earned at the IMO Deposit Rate and the deduction of any accrued costs and fees.

## **6 MAINTENANCE OF RESERVE CAPACITY SECURITY**

### **6.1 Requirement to Maintain Reserve Capacity Security with the IMO**

- 6.1.1 Where a Market Participant's Reserve Capacity Security is due to expire or cease to have effect for any reason and the Market Participant will continue to have an obligation to ensure the IMO holds Reserve Capacity Security, then the Market Participant must provide replacement Reserve Capacity Security that becomes effective at or prior to the expiry of the existing Reserve Capacity Security. **[Clause 4.13.3]**

- 6.1.2 Where a Market Participant becomes aware that its Reserve Capacity Security is affected by any of the circumstances as outlined in step 6.1.4 of the Procedure, it must:

- (a) notify the IMO in writing immediately; and
- (b) provide duly effective replacement Reserve Capacity Security in an amount not less than its most recently calculated amount under clause 4.13.2 of the Market Rules, before the end of the next Business Day or within any longer period that the IMO has approved in writing under step 6.1.6 **[Clause 4.13.4]**.

- 6.1.3 Where the IMO becomes aware of any circumstance (as outlined in step 6.1.4 of this Procedure) in relation to a Market Participant, it must:

- (a) notify the Market Participant in writing immediately; and
- (b) require the Market Participant to provide duly effective replacement Reserve Capacity Security in an amount not less than its most recently calculated amount under clause 4.13.2, before the end of the next Business Day or within any longer period that the IMO has approved in writing under step 6.1.6 **[Clause 4.13.4]**.

- 6.1.4 For the purposes of clause 4.13.4 of the Market Rules, circumstances that may require replacement Reserve Capacity Security in step 6.1.2 or 6.1.3 include, but are not limited to where:
- (a) existing Reserve Capacity Security is no longer current or valid;
  - (b) the Reserve Capacity Security provider no longer meets any one of the Acceptable Credit Criteria;
  - (c) the Reserve Capacity Security provider ceases to or threatens to cease to carry on providing Reserve Capacity Security in relation to the Market Participant; or
  - (d) the Reserve Capacity Security provider in relation to the Market Participant becomes insolvent or is dissolved.
- 6.1.5 A Market Participant requesting the IMO to provide the replacement Reserve Capacity Security after the end of the next Business Day under steps 6.1.2(b) or 6.1.3(b), must request an extension of the Due Date for providing replacement Reserve Capacity Security in writing.
- 6.1.6 The IMO may, in its absolute discretion, approve or reject a Market Participant's request for an extension in step 6.1.5. The IMO must provide its decision in writing to the Market Participant as soon as practicable **[Clause 4.13.4(c)]**.

## **7 REPLACEMENT OF RESERVE CAPACITY SECURITY**

### **7.1 A Market Participant's Notification of Replacing its Reserve Capacity Security when the IMO Holds Excess**

7.1.1 Where a Market Participant receives the IMO's notification under step 4.2.2 of this Procedure that excess Reserve Capacity Security is held by the IMO, then the Market Participant may notify the IMO in writing of its intention to replace its Reserve Capacity Security **[Clause 4.13.2C]**.

7.1.2 A Market Participant must include in its notification provided in step 7.1.1 of this Procedure:

- (a) the form of replacement Reserve Capacity Security arrangement to be provided and evidence that it will meet the requirements of clause 4.13.5 of the Market Rules **[Clause 4.13.2C(a)]**;
- (b) the amount of the Reserve Capacity Security which must not be less than the recalculated amount under clause 4.13.2(b) **[Clause 4.13.2C(b)]**; and
- (c) a Nominated Exchange Date on which the IMO is requested to return the current Reserve Capacity Security arrangement to the Market Participant, where this date must be at least 10 Business Days after the date the Market Participant will provide its replacement Reserve Capacity Security arrangement to the IMO.

### **7.2 A Market Participant's Notification of Replacing a Reserve Capacity Security Arrangement**

7.2.1 A Market Participant may replace the Reserve Capacity Security arrangement provided (for example from a Security Deposit to a bank undertaking) by notifying the IMO in writing of its intention prior to the replacement.

7.2.2 A Market Participant must include in its notification provided in step 7.2.1 of this Procedure:

- (a) the form of replacement Reserve Capacity Security arrangement to be provided;

- (b) evidence that the replacement Reserve Capacity Security arrangement will meet the requirements of clause 4.13.5 of the Market Rules; and
- (c) a Nominated Exchange Date on which the IMO is requested to return the current Reserve Capacity Security arrangement to the Market Participant, where this date must be at least 10 Business Days after the date the Market Participant will provide its replacement Reserve Capacity Security arrangement to the IMO.

### **7.3 The Process for Replacing Reserve Capacity Security**

- 7.3.1 The IMO and the Market Participant must agree upon the Nominated Exchange Date notified by the Market Participant under step 7.1.2(c) or 7.2.2(c) of this Procedure.
- 7.3.2 The Market Participant must then submit to the IMO the replacement Reserve Capacity Security arrangement:
  - (a) in accordance with step 5.1 of this Procedure;
  - (b) at least 10 Business Days before the Nominated Exchange Date; and
  - (c) with a duly effective date that falls no less than five Business Days before the Nominated Exchange Date **[Clause 4.13.2C(c)]**.
- 7.3.3 Within five Business Days of receiving the completed replacement Reserve Capacity arrangement, the IMO must assess whether the arrangement is compliant with step 5.6.1 of this Procedure.
- 7.3.4 If the IMO assesses the replacement Reserve Capacity Security arrangement as compliant under step 7.3.3, the IMO must, on the Nominated Exchange Date, return the superseded Reserve Capacity Security arrangement:
  - (b) in person to the Market Participant's Authorised Officer, where the superseded arrangement is a guarantee or bank undertaking; or
  - (c) by electronic transfer to the Market Participant's nominated bank account, where the superseded arrangement is a Security Deposit, followed by returning the Security Deposit deed in person to the Market Participant's Authorised Officer.
- 7.3.5 If the IMO assesses the replacement Reserve Capacity Security arrangement as non-compliant under step 7.3.3, the IMO must:
  - (a) notify the Market Participant of the decision in writing with reasons; and
  - (b) provide a new Nominated Exchange Date to allow the Market Participant to resubmit its replacement Reserve Capacity Security arrangement in accordance with step 7.1 of this Procedure.

## **8 RETURN OF RESERVE CAPACITY SECURITY**

### **8.1 Ninety Percent Test for Return of Reserve Capacity Security**

- 8.1.1 A Market Participant that has provided Reserve Capacity Security must meet the following conditions for the return of its Reserve Capacity Security after the end of the relevant Capacity Year:
  - (a) either:
    - i. the Facility has operated to a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of Capacity Credits specified in clause 4.20.5A of the Market Rules, in at least two Trading Intervals before the end of the relevant Capacity Year; or

- ii. the Market Participant for that Facility has provided the IMO a report under clause 4.13.10C of the Market Rules, which specifies that the Facility can operate at a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of Capacity Credits specified in clause 4.20.5A of the Market Rules; and

(b) the Facility must be in Commercial Operation [**Clause 4.13.10**].

## 8.2 One Hundred Percent Test for Return of Reserve Capacity Security

8.2.1 A Market Participant that has provided Reserve Capacity Security must meet the following conditions to apply to the IMO for the return of its Reserve Capacity Security at any time before the end of the relevant Capacity Year:

- (a) the Facility must have operated at a level equivalent to its Required Level, adjusted to 100 percent of the level of Capacity Credits specified in clause 4.20.5A of the Market Rules, in at least two Trading Intervals before the end of the relevant Capacity Year; and
- (b) the Facility must be in Commercial Operation [**Clause 4.13.13**].

## 8.3 Determining Required Level

8.3.1 For the purposes of clause 4.13.10(a) or 4.13.13(a) of the Market Rules and step 8.1.1(a) or 8.2.1(a) of this Procedure, the IMO must determine the Required Level (which for an upgraded Facility is calculated for the Facility as a whole) for each Facility in accordance with the following:

- (a) for Certified Reserve Capacity assigned to Scheduled Generators under clause 4.11.1(a) of the Market Rules, the Required Level in Trading Interval  $t$  is:

$$\frac{CC_{int} \times TDC(Temp(t))}{TDC(41^{\circ}C)}$$

Where:

$CC_{int}$  is the number of Capacity Credits initially assigned under clause 4.20.5A of the Market Rules;

$Temp(t)$  is the temperature during Trading Interval  $t$  measured according to the method specified in the Standing Data for the Facility;

$TDC(Temp(t))$  is the Facility output indicated in the Temperature Dependence Curve at temperature  $Temp(t)$ ; and

$TDC(41^{\circ}C)$  is the Facility output indicated in the Temperature Dependence Curve at a temperature of  $41^{\circ}C$ .

- (b) for Certified Reserve Capacity assigned to a Scheduled Generator or a Non-Scheduled Generator under clause 4.11.2(b), the Required Level in Trading Interval  $t$  is:

$$\frac{RL_{CRC} \times CC_{int}}{CRC}$$

Where:

$RL_{CRC}$  is the Required Level for the Facility provided under clause 4.11.3B of the Market Rules and determined on the same basis as the Certified Reserve Capacity for that Facility;

$CC_{int}$  is the number of Capacity Credits initially assigned under clause 4.20.5A of the Market Rules; and

$CRC$  is the Certified Reserve Capacity assigned to the Facility (which was used as the basis for determining the Facility's Required Level).

- (c) for Demand Side Programmes, by the following formula:

$$RD - CC_{int}$$

Where:

$RD$  is the Relevant Demand as determined in clause 4.26.2CA of the Market Rules; and

$CC_{int}$  is the number of Capacity Credits initially assigned under clause 4.20.5A of the Market Rules.

## 8.4 Determining Commercial Operation Status

8.4.1 For the purposes of clause 4.13.10(b) or 4.13.13(b) of the Market Rules and steps 8.1.1(b) or 8.2.1(b) of this Procedure, a Market Participant may request the IMO in writing to make a determination whether its Facility is in Commercial Operation **[Clause 4.13.10A]**.

8.4.2 To decide whether a Facility is in Commercial Operation, the IMO must have regard to clause 4.13.10B(a) and may consider any other relevant information submitted by the Market Participant under clause 4.13.10B(b) of the Market Rules including, but not limited to:

- (a) a signed statement from the Market Participant that the Facility is in Commercial Operation;
- (b) technical documents that indicate the Facility is in Commercial Operation, such as evidence of trading, transactional documentation or financial statements; and
- (c) for a Demand Side Programme, copies of executed agreements to engage in a Demand Side Programme from companies which are being supplied with electricity from the nominated NMI's associated with that Facility.

8.4.3 Within 20 Business Days of receipt of a request under step 8.4.1, the IMO must:

- (a) determine whether a Facility is in Commercial Operation in accordance with step 8.4.2; and
- (b) notify the Market Participant in writing of the status assigned to that Facility, with reasons.

## 8.5 Other Conditions for Return of Reserve Capacity Security

8.5.1 Where the Reserve Capacity Security for a Facility relates to only a portion of the Facility's total Capacity Credits, that Facility as a whole must pass the Ninety Percent Test or One Hundred Percent Test for the return of its Reserve Capacity Security.

- 8.5.2 Where the IMO assesses the performance of a Demand Side Programme under the Ninety Percent Test or One Hundred Percent Test for the return of Reserve Capacity Security, the IMO must not take into account the same Non-Dispatchable Load or Interruptible Load more than once during the relevant Capacity Year for the Demand Side Programme.
- 8.5.3 Where any Non-Dispatchable Load or Interruptible Load was associated with more than one Demand Side Programme during the relevant Capacity Year, the IMO must determine when each of those Demand Side Programmes met the performance requirements under the Ninety Percent Test or One Hundred Percent Test and must take the relevant Load into account for only the first of those Demand Side Programmes that met the performance requirements. For the purposes of determining whether to return Reserve Capacity Security for all other Demand Side Programmes that the relevant Load had been associated with during the Capacity Year, the IMO must calculate the Relevant Demand and Demand Side Programme Load for the Demand Side Programme as if that Load was not associated with that Demand Side Programme.
- 8.5.4 For the purpose of assessing the performance of Demand Side Programmes under the Ninety Percent Test or One Hundred Percent Test, the IMO must exclude any Trading Intervals where the relevant Market Participant has a Reserve Capacity Deficit greater than zero for another Demand Side Programme for which the IMO does not hold the benefit of a Reserve Capacity Security.
- 8.6 The IMO's Obligation to Return Reserve Capacity Security after Ninety Percent Test**
- 8.6.1 Where the Facility has met the conditions in the Ninety Percent Test before the end of the relevant Capacity Year, the IMO must return any Reserve Capacity Security to the Market Participant:
- (a) as soon as practicable after the end of the relevant Capacity Year and before 30 November of Year 4 of the relevant Reserve Capacity Cycle; and
  - (b) by following step 8.8 of this Procedure [**Clause 4.13.10**].
- 8.7 The IMO's Obligation to Return Reserve Capacity Security after One Hundred Percent Test**
- 8.7.1 Where the Facility has met the conditions in the One Hundred Percent Test before the end of the relevant Capacity Year, the Market Participant may apply to the IMO in writing at any time before the end of the relevant Capacity Year for the return of its Reserve Capacity Security [**Clause 4.13.13**].
- 8.7.2 Where the IMO receives an application for the return of Reserve Capacity Security under step 8.7.1 of this Procedure, the IMO must within 10 Business Days of receipt of that application:
- (a) determine whether the need to maintain the Reserve Capacity Security has ceased by assessing if the conditions in the One Hundred Percent Test have been met;
  - (b) notify the Market Participant in writing of its determination under step 8.7.2(a); and
  - (c) if applicable, follow step 8.8 of this Procedure to return the Reserve Capacity Security [**Clause 4.13.14**].

## **8.8 The IMO's Process of Returning Reserve Capacity Security to Eligible Market Participants**

8.8.1 Where the IMO is required to return Reserve Capacity Security to eligible Market Participants under steps 8.6 and 8.7 of this Procedure, the IMO must do so as follows:

- (a) if the Reserve Capacity Security is a Security Deposit, the IMO must arrange for an electronic transfer of the amount of the Security Deposit plus any interest earned **[Clause 4.13.14(c)]**; and
- (b) if the Reserve Capacity Security is a guarantee or bank undertaking, the IMO must notify the Reserve Capacity Security provider in writing that the IMO relinquishes any rights to Draw Upon the Reserve Capacity Security **[Clause 4.13.14(d)]**.

8.8.2 As soon as practicable after step 8.8.1 of this Procedure, the IMO must also arrange for the return of the Reserve Capacity Security arrangement (being the proforma deeds for the guarantee, bank undertaking or Security Deposit, as applicable):

- (a) in person to the Authorised Officer of the Market Participant; or
- (b) by courier or registered mail, requiring a signature upon receipt.

## **9 DRAWING UPON RESERVE CAPACITY SECURITY**

### **9.1 Conditions in which the IMO May Draw Upon Reserve Capacity Security**

9.1.1 If a Market Participant fails to satisfy the conditions in the Ninety Percent Test, then the IMO may Draw Upon the Market Participant's Reserve Capacity Security as soon as practicable after the end of the relevant Capacity Year and before 30 November of Year 4 of the relevant Reserve Capacity Cycle **[Clauses 4.13.11 and 4.13.11A]**.

### **9.2 Application of Monies Drawn Upon**

9.2.1 The IMO must apply the monies drawn upon in step 9.1.1 of this Procedure as following:

- (a) firstly, to offset the cost of funding any Supplementary Capacity Contracts for any capacity shortage that may stem entirely or in part from the Facility not being available during the relevant Capacity Year; and
- (b) secondly, once all costs of funding Supplementary Capacity Contracts are covered as applicable, make a rebate payment to Market Customers in proportion to their Individual Reserve Capacity Requirements during the Trading Month in accordance with Chapter 9 of the Market Rules **[Clause 4.13.11A]**.

9.2.2 If the Reserve Capacity Security drawn upon is a Security Deposit, then the Market Participant forfeits the entire amount of the deposit **[Clause 4.13.12]**.



INDEPENDENT  
MARKET  
OPERATOR

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## Wholesale Electricity Market Procedure Change Proposal

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Procedure Change ID: PC\_2014\_03

### Change requested by

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<b>Date submitted:</b>	DD Month 2014
<b>Urgency:</b>	2-medium
<b>Procedure change title:</b>	Amendments to Market Procedure: Determination of the Benchmark Reserve Capacity Price
<b>Market Procedure(s) affected:</b>	Market Procedure: Determination of the Benchmark Reserve Capacity Price

### Introduction

The IMO or System Management, as applicable, may initiate the Procedure Change Process by developing a Procedure Change Proposal. Rule Participants may notify the IMO or System Management, as applicable, where they consider an amendment or replacement of a Market Procedure would be appropriate.

If an Amending Rule requires the IMO or System Management to develop new Market Procedures or to amend or replace existing Market Procedures, then the IMO or System Management, as applicable, is responsible for the development, amendment, or replacement of Market Procedures so as to comply with the Amending Rule.

Market Procedures:

- (a) must:
- i. be developed, amended or replaced in accordance with the process in the Wholesale Electricity Market (WEM) Rules (Market Rules);
  - ii. be consistent with the Wholesale Market Objectives; and
  - iii. be consistent with the Electricity Industry Act, Electricity Industry (Wholesale Electricity Market) Regulations and the Market Rules; and



- (b) may be amended or replaced in accordance with clause 2.10 of the Market Rules and must be amended or replaced in accordance with clause 2.10 of the Market Rules where a change is required to maintain consistency with Amending Rules.

The Wholesale 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; 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 Procedure Change Requested

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### 1. Provide a reason for the proposed new, amended or replacement Market Procedure:

#### Background

The Market Procedure: Maximum Reserve Capacity Price (Market Procedure) documents the methodology the IMO uses and the processes it follows in determining the Maximum Reserve Capacity Price in each Reserve Capacity Cycle.

The Market Procedure was last updated in 2012 (PC\_2012\_08<sup>1</sup>) primarily to reflect the Amending Rules in the Rule Change Proposal: Competitive Load Following and Balancing Market (RC\_2011\_10<sup>2</sup>).

#### Proposed Amendments

The Rule Change Proposal: Changes to the Reserve Capacity Price and the Dynamic Reserve Capacity Refunds Regime (RC\_2013\_20<sup>3</sup>) proposes to rename the Maximum Reserve Capacity Price (MRCP) in the Market Rules as the Benchmark Reserve Capacity

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<sup>1</sup> Available at: [http://www.imowa.com.au/PC\\_2012\\_08](http://www.imowa.com.au/PC_2012_08)

<sup>2</sup> Available at: [http://www.imowa.com.au/RC\\_2011\\_10](http://www.imowa.com.au/RC_2011_10)

<sup>3</sup> Available at: [http://www.imowa.com.au/RC\\_2013\\_20](http://www.imowa.com.au/RC_2013_20)

Price. This change is proposed on the basis that the MRCP has become more representative of a benchmark price that signals the expected, rather than the maximum price for providing Reserve Capacity. The proposed amendments to this Market Procedure reflect this change in name in the title of the Market Procedure as well as throughout.

The IMO has also taken the opportunity to:

- (a) reflect the IMO's use of the bond-yield approach developed by the Economic Regulation Authority to determine the debt risk premium;
- (b) expand on some definitions;
- (c) correct minor inconsistencies; and
- (d) update the format of the Market Procedure.

### **Call for Submissions**

The IMO is seeking submissions regarding this proposal. The submission period is 20 Business Days from the publication of this Procedure Change Proposal. Submissions must be delivered to the IMO by **5:00 PM** on **Day, DD Month 2014**.

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

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

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## **2. Provide the wording of the amended Procedure**

The proposed amended Market Procedure is provided as an attachment to this proposal.

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## **3. Describe how the proposed changes to the Market Procedure would be consistent with the Market Rules, the Electricity Industry Act and Regulations**

The proposed amended Market Procedure has been reviewed as a whole by the IMO to ensure compliance of the Market Procedure with the relevant provisions in the:

- Electricity Industry Act;
- Regulations; and
- Market Rules.

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**4. Describe how the proposed changes to the Market Procedure would be consistent with the Wholesale Market Objectives**

The IMO considers that the proposed amendments:

- (a) support the operation of the proposed Amending Rules in RC\_2013\_20;
- (b) ensure consistency between Market Rules and the Procedure by reflecting the amended terminology proposed in RC\_2013\_20 in the Procedure; and
- (c) improve transparency by eliminating any confusion about the operation of the Reserve Capacity Mechanism and the opportunity it offers to new market entrants.

Additionally, the proposed amendments do not change the current operation of the Market Rules.

As a result, the IMO considers that the proposed amended Market Procedure as a whole is consistent with the Wholesale Market Objectives.

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**Procedure Change ID:** PC\_2014\_03

**Received Date:** **DD Month 2014**



INDEPENDENT  
MARKET  
OPERATOR



Market Procedure:

Determination of the Maximum Benchmark

Reserve Capacity Price

67



ELECTRICITY INDUSTRY ACT 2004  
ELECTRICITY INDUSTRY  
(WHOLESALE ELECTRICITY MARKET)

REGULATIONS 2004

WHOLESALE ELECTRICITY MARKET RULES

COMMENCEMENT:

This Market Procedure took effect from 8:00am (WST) on the  
same date as the Wholesale Electricity Market Rules.

**VERSION HISTORY**

Version	Effective Date	Notes
1	13 October 2008	Market Procedure for Determination of the Maximum Reserve Capacity Price resulting from PC_2008_06
2	4 December 2008	Amended Market Procedure for Determination of the Maximum Reserve Capacity Price resulting from PC_2008_14
3	1 April 2010	Amendments to the Procedure resulting from Procedure Change Proposal PC_2009_12

4	11 October 2010	Amendments to the Procedure resulting from Procedure Change Proposal PC_2010_04
5	24 October 2011	Amendments to the Procedure resulting from Procedure Change Proposal PC_2011_06
6	15 January 2013	Amendments to the Procedure resulting from Procedure Change Proposal PC_2012_08
<u>7</u>	<u>1 July 2014</u>	<u>Amendments to the Procedure resulting from Procedure Change Proposal PC_2014_03, including change to the title of the Procedure.</u>

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# 1 PROCEDURE OVERVIEW

## 1.1 Relationship with the Market Rules

1.1.1 This Market Procedure ~~for~~ Determination of the ~~Maximum Benchmark~~ Reserve Capacity Price ~~is made in accordance with~~ ~~should be read in conjunction with~~ clause 4.16.3 of the Wholesale Electricity Market (WEM) Rules (Market Rules) and ~~should be read in conjunction with section 4.16~~ ~~is made in accordance with~~ ~~clause 4.16.3~~ of the Market Rules.

1.1.2 References to particular Market Rules within this Procedure in bold and square brackets [**Clause XX**] are current as of ~~1 July~~ ~~November 2012~~ ~~4~~. These references are included for convenience only and are not part of this Procedure.

## 1.2 Purpose of this Procedure

1.2.1 This Procedure describes the methodology that the IMO must use and the steps that the IMO must undertake in determining the ~~Maximum Benchmark~~ Reserve Capacity Price in each Reserve Capacity Cycle.

## 1.3 Application of this Procedure

1.3.1 In this Procedure, where obligations are conferred on a Rule Participant, that Rule Participant must comply with the relevant obligations in accordance with clauses ~~2.9.6, 2.9.7 and 2.9.8~~ ~~of the Market Rules~~, as applicable.

## 1.4 Associated Market Procedures

1.4.1 The following ~~IMO~~ Market Procedures are associated with this Procedure:

(a) Balancing Facility Requirements.

1.4.2 The following System Management Power System Operation Procedures are associated with this Procedure:

(a) Communications and Control Systems.

## 1.5 Conventions ~~u~~Used

~~—~~ In this Procedure the conventions specified in clauses 1.3 ~~to~~ 1.5 of the Market ~~Rules~~ apply.

## 1.81.6 Terminologies and Definitions

1.6.1 A word or phrase defined in the ~~Market Rules, the~~ Electricity Industry Act, ~~or the~~ Electricity Industry (Wholesale Electricity Market) Regulations or the Market Rules has the same meaning when used in this Procedure. In addition the following defined terms have the meaning given below.

**Table 1 – Defined Terms**

Term	Definition
<b>Access Offer</b>	<del>Means a form of access contract as defined under section A2.1 of the which complies with clause A2.103 or A2.105 of the Electricity Networks Access Code 2004, as applicable. ; which has been signed by the service provider and is in such a form that it can, without anything else being required, become an access contract when signed by an applicant</del> Has the same meaning as in the Electricity Networks Access Code 2004
<b><u>Capital Asset Pricing Model</u></b>	<u>Means the model that describes the relationship between risk and expected return used to determine the components of the WACC.</u>
<b><u>Consumer Price Index</u></b>	<u>Means the general measure of price inflation for a constant basket of goods and services representative of consumption expenditure by metropolitan Australian households</u>
<b>Contributions Policy</b>	<del>Means a policy in an access arrangement under section 5.1(h) of the Electricity Networks Access Code 2004 dealing with capital contributions made to infrastructure projects by users. Has the same meaning as in the Electricity Networks Access Code 2004.</del>
<b><u>Declared Sent Out Capacity</u></b>	<del>Has the same meaning as in the Electricity Networks Access Code 2004</del>
<b>Power Station</b>	Means the theoretical power station upon which the <del>Maximum Benchmark</del> Reserve Capacity Price is based, described in step <del>2.1 2.1</del> of this Procedure.
<b>Total Transmission Costs</b>	Means the costs to directly connect a generator to the transmission network and to augment the shared transmission network to accommodate the capacity of that generator, which are estimated in step <del>2.4 2.4</del> of this Procedure
<b><u>WACC</u></b>	<u>The Weighted Average Cost of Capital which is teh cost of capital applied to various costing components of the Benchmark Reserve Capacity Price and as determined in step 2.9 of this Procedure</u>

## 2 **DETERMINATION AND ANNUAL REVIEW OF THE MAXIMUM BENCHMARK RESERVE CAPACITY PRICE**

### 2.2.1 **Definition of Power Station**

2.2.1.1 The Power Station upon which the Maximum Benchmark Reserve Capacity Price is based must:

- (a) be representative of an industry standard liquid-fuelled Open Cycle Gas Turbine (OCGT) power station;
- (b) have a nominal nameplate capacity of 160 MW prior to the addition of any inlet cooling system;
- (c) operate on distillate as its fuel source;
- (d) have a capacity factor of 2%;
- (e) include low Nitrous Oxide ~~(NO<sub>x</sub>)~~ burners or associated technologies as would be required to demonstrate good practice in power station development;
- (f) include an inlet air cooling system and water receiveal and storage facilities to allow 14 hours of continuous operation, where in the opinion of the IMO this would be cost effective; and
- (g) include the minimum level of equipment or systems required to satisfy the Balancing Facility Requirements.

### 2.3.2 **Scope of the Factors used in Determining the ~~to Maximum Benchmark~~ Reserve Capacity Price**

2.3.1.2.1 The Maximum Benchmark Reserve Capacity Price must include all reasonable costs expected to be incurred in the development of the Power Station, which must include the estimation and determination of:

- (a) Power Station balance of plant costs, which are those other ancillary and infrastructure costs that would normally be experienced when developing a project of this nature;
- (b) land costs;
- (c) costs associated with the development of liquid fuel storage and handling facilities;
- (d) costs associated with the connection of the Power Station to the bulk transmission system;
- (e) allowances for legal costs, insurance costs, financing costs and environmental approval costs;
- (f) reasonable allowance for a contingency margin; and
- (g) estimates of fixed operating and maintenance costs for the Power Station, fuel handling facilities and the transmission connection components.

## 2.3 **~~2.3~~ Development of Costs for the Power Station**

2.3.1 ~~2.3.1~~ The IMO must engage a consultant to provide:

(a) an estimate of the costs associated with engineering, procurement and construction of the Power Station as at April in Year 3 of the Reserve Capacity Cycle;

~~(b) (b)~~—a summary of any escalation factors used in the determination; and

~~(c) (c)~~—likely output at 41°C which will take into account available turbine and inlet cooling technology, likely humidity conditions and any other relevant factors, which represents the expected Capacity Credit allocation for the Power Station.

~~2.3.2~~ ~~2.3.2~~—The Power Station costs must be determined with specific reference to ~~the use of~~ actual project-related data and must take into account the specific conditions under which the Power Station will be developed. This may include direct reference to:

(a) ~~e~~Existing power stations, or power station projects under development, in Australia and more particularly Western Australia;~~;~~

(b) ~~w~~Worldwide demand for gas turbine engines for power stations;~~;~~

(c) ~~The~~ engineering, design and construction, environment and cost factors in Western Australia; ~~and;~~

(d) ~~T~~he level of economic activity at the state, national and international level.

~~2.3.3~~ ~~The 2.3.3~~—~~D~~development of the Power Station costs must include components for the gas turbine engines, and all ~~B~~alance of ~~P~~lant costs that would normally be applicable to such a Power Station. This must include, but ~~will not be is not~~ limited to the following items:

(a) ~~c~~Civil ~~W~~orks;~~;~~

(b) ~~m~~Mechanical ~~w~~orks;~~;~~

(c) ~~e~~Electrical ~~w~~orks;~~;~~

(d) ~~b~~Buildings and ~~s~~tructures;~~;~~

(e) ~~e~~Engineering and ~~p~~lant ~~S~~etup;~~;~~

~~(f)~~—~~Miscellaneous and other costs.~~

~~(g)~~(f) ~~c~~ommunications and ~~c~~ontrol equipment;~~;~~

~~(h)~~(g) ~~c~~ommissioning ~~c~~osts; ~~and;~~

—~~miscellaneous and other costs.~~

~~(i)~~(h) ~~Commissioning Costs.~~

## ~~2.4~~ ~~2.4~~—Transmission Connection Works

~~2.4.1~~ ~~2.4.1~~—Western Power must provide an estimate of the Total Transmission Costs in accordance with the methodology ~~outlined in this step 2.4.1 herein~~ to connect the generator and deliver the output to loads, consistent with the relevant planning criteria in the Technical Rules.

~~(a)~~ The estimated Total Transmission Costs must be derived from capital contributions (either paid historically or expected to be paid to Western Power under Access Offers and Western Power's Contributions Policy as approved by the Economic ~~Regulatory~~ ~~Regulation~~ Authority (~~ERA~~)) only for generators that are capable of being gas or liquid fuelled.

The calculation must exclude any Facility where, in the opinion of Western Power:

- i. the significant driver for the location of the Facility is the access to source energy (fuel or renewable) or the need to embed the generation with a load (electrical or heat). For clarity, this includes but is not limited to coal, renewable and embedded (including waste heat capture) generators;
- ii. the Facility is connected on a shared distribution feeder; or
- iii. the capital contribution does not relate to a significant increase in the Declared Sent Out Capacity associated with the Facility.

                     Western Power may seek clarification from the IMO with regard to the                       
                     inclusion or exclusion of specific projects in line with the above criteria.

(b) For the purpose of the calculation, the un-escalated dollar value of the capital contribution for a Facility must be attributed to the Capacity Year for which the Facility is first assigned, or expected to be assigned, Capacity Credits and must be assumed to be in the dollars as at 1 October of that Capacity Year.

(c) The estimate of Total Transmission Costs must use the following process:

(a)i. Historic and forecast capital contribution data must be collated for all works required to connect relevant generators to the transmission network including:

i-1. all transmission connection works required to connect from the high voltage (HV) bus bar (or in the absence of a HV bus bar, the HV circuit breaker or terminals of generator step-up transformers) to the shared transmission network (including all miscellaneous costs such as procuring land easements etc.); and

ii-2. all transmission works to reinforce the shared transmission network where required in accordance with the Access Code and the Technical Rules.

ii. Capital contributions paid or forecast to be paid to Western Power may not have been calculated to cover the cost of all connection assets required to connect from the HV bus bar (or in the absence of a HV bus bar, the HV circuit breaker or terminals of generator step-up transformers) to the shared transmission network. In this case, Western Power must identify the connection assets that have not been covered in the capital contribution and must add to the capital contribution its estimate of the cost to construct the assets based on:

i-1. the actual length and route of transmission or distribution lines;

ii-2. the actual line voltage;

iii-3. sufficient capacity to allow for transmission of the Certified Reserve Capacity (actual or anticipated) of the Facility;

iv-4. the terrain described in step ~~2.4.2(e)~~2.4.2(e); and

v-5. an estimate of the easement costs described in step ~~2.4.2(h)~~2.4.2(h).

- ~~(b)~~iii. For years for which no historic capital contribution data or Access Offers for relevant generators are available, a connection cost must be calculated on the basis defined in step 2.4.22.4.2. For this purpose it is assumed that the costs of the works described in step 2.4.2 2.4.2 are fully borne by the connecting generator and the cost to reinforce the shared transmission network is assumed to be zero.
- ~~(c)~~iv. The sum of connection costs for each Capacity Year must be divided by the sum of the generators' Certified Reserve Capacity to provide an "average per unit capacity" connection cost for each year. The quantity of Certified Reserve Capacity for a Facility will be the level most recently assigned to that Facility that is attributable to that capital contribution. Western Power may consult with the IMO to confirm the appropriate quantity of Certified Reserve Capacity for each Facility.
- v. The average per unit capacity cost must be determined for the "Latest Offer Year", being the year which is the later of:
  - i.1. the latest Capacity Year for which a capital contribution has been determined or an Access Offer has been made; and
  - ii.2. the Capacity Year commencing in Year 1 of the relevant Reserve Capacity Cycle.
- vi. The average per unit capacity cost must also be determined for each of the 4four Capacity Years immediately preceding the Latest Offer Year.
- ~~(d)~~vii. The five average per unit capacity costs determined in steps v and vi ~~(de)~~ must be escalated to 1 April of Year 3 of the relevant Reserve Capacity Cycle. The basis of escalation must be the average change over 5five years in the estimates calculated consistent with step 2.4.22.4.2. Where 5five years of data calculated on a common basis is not available the escalation rate must be averaged over the period for which equivalent data is available.
- ~~(e)~~viii. The escalated per unit capacity costs from step vii ~~(ed)~~ must be multiplied by the corresponding weighting factors in the table below:

Year	Weighting
Latest Offer Year	7
Latest Offer Year - 1	5
Latest Offer Year - 2	3
Latest Offer Year - 3	1
Latest Offer Year - 4	1

- ix. The sum of the 5five years of weighted, escalated, average per unit capacity costs for the 5five years under consideration must be divided by 17 to provide a weighted escalated average per unit connection cost.
- ~~(f)~~x. The weighted escalated average per unit cost must be scaled up by 15% percent as an allowance for forecasting error margin to provide the forecast connection cost.

~~(g)~~(d) Western Power must appoint a suitable auditor to review the application of the process in step ~~2.4.2~~~~2.4.1~~ on an independent and confidential basis. Western Power must provide the advice of the auditor to the IMO together with its estimate of Total Connection Costs, and the IMO must publish the auditor's advice on the Market Web ~~S~~-site.

~~2.4.2~~ ~~2.4.2~~ For the purposes outlined in steps ~~2.4.1(c) and 2.4.1(d)~~ ~~2.4.1~~, Western Power must also estimate the cost of transmission connection works required to connect from the HV bus bar to the shared transmission network using the following process:

- (a) ~~T~~he capital cost (procurement, installation and commissioning, excluding land cost) of a generic, industry standard 330kV substation that facilitates the connection of the Power Station must be estimated;
- (b) ~~T~~he estimate must include all the components and costs associated with a standard substation;
- (c) ~~T~~he estimated cost must be based on a generic three breaker mesh substation configured in a breaker and a half arrangement;
- (d) ~~I~~t must be assumed that the substation is located adjacent to an existing transmission line and include an allowance for 2km of 330kV overhead single circuit line to the power station that will have one road crossing;
- (e) ~~I~~t must be assumed that the transmission connection to the Power Station will be located on ~~50% percent~~ flat - ~~50% percent~~ undulating land, ~~50% percent~~ rural - ~~50% percent~~ urban location and that there will be no unforeseen environmental or civil costs associated with the development;
- (f) It must be assumed that the connection of the substation into the existing transmission line is turn-in, turn-out and is based on the most economical (i.e. least cost) solution. It must be assumed that the existing transmission line will not require modification to allow the connection with the exception of one new tower located at the substation to allow a point of connection;
- (g) ~~C~~osts associated with any staging works must not be considered; ~~and~~
- (h) ~~S~~hallow connection easement costs will be included and must be estimated and provided by the IMO.

## ~~2.5~~ ~~2.5~~ Fixed Operating and Maintenance Costs

~~2.5.1~~ ~~2.5.1~~ The IMO must determine ~~f~~Fixed ~~O~~perating and ~~M~~aintenance (O&M) costs for the Power Station and the associated transmission connection works. The IMO may engage a consultant to assist the IMO in this process.

~~2.5.2~~ ~~2.5.2~~ The ~~f~~Fixed O&M costs may be separated into those costs associated with the Power Station, those costs associated with the transmission connection infrastructure and any other major components that are considered likely to be of sufficient magnitude so as to require separate determination.

~~2.5.3~~ ~~2.5.3~~ The ~~F~~ixed O&M costs must also include:

- (a) fixed network access and/or ongoing charges, which are to be provided by Western Power; and
- (b) an estimate of annual insurance costs ~~as at 1 October in Year 3 of the relevant Reserve Capacity Cycle~~ in respect of ~~P~~power ~~S~~tation asset replacement, business interruption and public and products liability

insurance as required under network access arrangements with Western Power.

~~2.5.4~~ ~~2.5.4~~ — To assist in the computation of annualised ~~f~~Fixed O&M costs, the costs associated with each major component will be presented for each ~~5~~five year period up to 60 years.

~~2.5.5~~ ~~2.5.5~~ — The ~~f~~Fixed O&M costs must be converted into an annualised ~~f~~Fixed O&M cost as required under the determination methodology in ~~step 2.10~~ section 1.14.

~~2.5.6~~ ~~The 2.5.6~~ — ~~F~~fixed O&M costs must be determined as at 1 October in Year 3 of the Reserve Capacity Cycle. Where ~~the f~~Fixed O&M costs have been determined at a different date, those costs must be escalated using the following escalation factors which must be applied to relevant components within the ~~F~~fixed O&M cost:

- (a) a ~~g~~Generation O&M ~~c~~Cost escalation factor for ~~g~~Generation O&M costs;
- (b) a ~~l~~Labour cost escalation factor for transmission and switchyard O&M costs; and
- (c) ~~the (e)~~eConsumer ~~p~~Price ~~i~~ndex (CPI) for fixed network access and/or ongoing charges determined with regard to the forecasts of the Reserve Bank of Australia and, beyond the period of any such forecasts, the mid-point of the Reserve Bank's target range of inflation.

## ~~2.6~~ ~~2.6~~ Fixed Fuel Cost

~~2.6.1~~ ~~2.6.1~~ — The IMO must engage a consultant to determine an estimate of the costs for the ~~l~~iquid ~~F~~uel storage and handling facilities including:

- (a) ~~(a)~~ — ~~a~~A fuel tank of 1,000 t (nominal) capacity including foundations and spillage bunds;
- (b) ~~(b)~~ — ~~F~~acilities to receive fuel from road tankers; and
- (c) ~~(c)~~ — ~~a~~All associated pipework, pumping and control equipment.

~~2.6.2~~ ~~2.6.2~~ — The estimate should be based on the following assumptions:

- (a) ~~(a)~~ — ~~l~~and is available for use and all appropriate permits and approvals for both the ~~p~~ower ~~s~~tation and the use of liquid fuel have been received; and
- (b) ~~a~~Any costing components that may be time-varying in nature must be disclosed by the IMO. Such components might be the cost of the liquid fuel, which will vary over time and as a function of exchange rates etc.

~~2.6.3~~ ~~2.6.3~~ — The costing must only reflect fixed costs associated with the ~~f~~Fixed ~~f~~Fuel ~~c~~ost (~~FFC~~) component and must include an allowance to initially supply fuel sufficient to allow for the Power Station to operate for 14 hours at maximum capacity.

~~2.6.4~~ ~~2.6.4~~ ~~The~~ — ~~F~~fixed ~~f~~Fuel ~~c~~osts (~~FFC~~) must be determined as at April in Year 3 of the Reserve Capacity Cycle. Where ~~f~~Fixed ~~f~~Fuel ~~c~~osts have been determined at a different date, those costs must be escalated using the annual CPI cost escalation factor determined in step ~~2.5.6(c)~~ ~~2.5.6(c)~~.

## ~~2.7~~ ~~2.7~~ Land Costs

~~2.7.1~~ ~~2.7.1~~ — The IMO must retain Landgate under a consultancy agreement each year to provide valuations on parcels of industrial land. The regions for which the analysis is to be conducted will include:

- (a) Collie Region
- (b) Kemerton Industrial Park Region
- (c) Pinjar Region
- (d) Kwinana Region
- (e) North Country Region; and
- (f) Kalgoorlie Region.

These areas represent the regions within the South West interconnected system ~~\_\_\_~~ (SWIS) where generation projects are most likely to be proposed and should provide a ~~\_\_\_~~ broad cross-section of options. The IMO may include additional locations if it ~~\_\_\_\_\_~~ considers appropriate.

~~2.7.2~~ ~~2.7.2~~ — The IMO must contract with Landgate to conduct the valuations on the same land parcel size, so as to provide a consistent method of valuing the cost of purchase of the land. The IMO will provide an indication as to the size of land required, which should be limited to the following options:

- (a) ~~One~~ 3ha parcel of land in an industrial area of a standard size with consideration given to any requirements for a buffer zone in that specific location. Where the minimum land size available in any specific location is greater than 3ha, for the purpose of calculating the land cost for that specific location, the minimum available land size at that location shall be used; ~~and-~~
- (b) ~~The~~ summation of multiple smaller parcels of land as appropriate to meet the requirements above.

~~2.7.3~~ ~~2.7.3~~ — Where the IMO is unable to contract with Landgate to provide the valuations described in steps ~~2.7.1~~ ~~2.7.1~~ and ~~2.7.2~~ ~~2.7.2~~, the IMO may seek valuations from an alternative provider of similar services.

~~2.7.4~~ ~~2.7.4~~ — The IMO must determine the average cost of the land parcels described in ~~steps 2.7.1 and 2.7.2~~ ~~steps 2.7.1 and 2.7.2~~.

~~2.7.5~~ ~~2.7.5~~ — The average ~~Land~~ ~~Cost~~, ~~LC~~, must be determined as at April in Year 3 of the Reserve Capacity Cycle. Where the average ~~Land~~ ~~Cost~~ has been determined at a different date this cost must be escalated using the CPI escalation factor determined in step ~~2.5.6(c)~~ ~~2.5.6(c)~~.

## ~~2.8~~ ~~2.8~~ — Legal, Financing, Insurance, Approvals, Other Costs and Contingencies (margin M)

~~2.8.1~~ ~~2.8.1~~ — The IMO must engage a consultant to determine the value of margin M, which shall constitute the following costs associated with the development of the Power Station project:

- (a) legal costs associated with the design and construction of the ~~P~~ ~~power~~ ~~S~~ ~~station~~;
- (b) financing costs associated with equity raising;
- (c) insurance costs associated with the project development phase;
- (d) approval costs including environmental consultancies and approvals, and local, state and federal licensing, planning and approval costs;

- (e) other costs reasonably incurred in the design and management of the ~~p~~Power ~~S~~station construction; and
- (f) any contingency costs.

## ~~2.9~~ **2.9 Weighted Average Cost of Capital (WACC)**

~~2.9.1~~ **2.9.1** — The IMO must determine the cost of capital to be applied to various costing components of the ~~Maximum Benchmark~~ Reserve Capacity Price. This cost of capital must be an appropriate WACC for the generic Power Station project considered, where that project is assumed to receive Capacity Credits through the Reserve Capacity Auction and be eligible to receive a Long-Term Special Price Arrangement through the Reserve Capacity Mechanism.

~~2.9.2~~ **2.9.2** — The WACC will be applied directly:

- ~~(a)~~ **(a)** — in the annualisation process used to convert the Power Station project capital cost into an annualised capital cost; and
- ~~(b)~~ **(b)** — to account for the cost of capital in the time period between when the Reserve Capacity Auction is held (i.e. when capital is raised), and when the payment stream is expected to be realised. To maintain computational simplicity it is assumed that the total investment cost of the ~~generic p~~Power ~~S~~station will be incurred in even incremental amounts over the 12 month period immediately preceding ~~the Year 3 of the Reserve Capacity Cycle, first Reserve Capacity Year~~. As a result the effective compensation period for the total investment cost for the ~~generic p~~Power ~~S~~station will be six months as detailed in the ~~CAPCOST~~ formula in step ~~2.10.1(c)~~ ~~2.10.1(c)~~.

~~2.9.3~~ **2.9.3** — The methodology adopted by the IMO to determine the WACC will involve a number of components that require review. These components are classed as those which require review annually (called ~~a~~Annual ~~-~~components) and those structural components of the WACC which require review less frequently (called ~~5-~~Yearly components) as detailed in step ~~2.9.8~~ ~~2.9.8~~.

~~2.9.4~~ **2.9.4** — In determining the WACC, the IMO:

- (a) must annually review and determine values for the ~~a~~Annual components; and
- (b) may review and determine values for the ~~5-~~Yearly components that differ from those in ~~step 2.9.8~~ ~~step 2.9.8~~ if, in the IMO's opinion, a significant economic event has occurred since undertaking the last ~~5-~~yearly review of the ~~Maximum Benchmark~~ Reserve Capacity Price in accordance with clause 4.16.9 of the Market ~~-~~Rules.

~~2.9.5~~ **2.9.5** — The IMO may engage a consultant to assist the IMO in reviewing the ~~Capital Asset Pricing Model (CAPM)~~ components of the WACC listed under ~~step 2.9.8~~ ~~step 2.9.8~~.

~~2.9.6~~ **2.9.6** — The IMO ~~shall~~ ~~must~~ ~~compute~~ ~~calculate~~ the WACC ~~on the following basis~~:

- ~~(a)~~ **(a)** — The WACC ~~shall~~ ~~must~~ ~~use~~ ~~using~~ the ~~Capital Asset Pricing Model (CAPM)~~ as the basis for calculating the return ~~on~~ ~~the~~ equity;
- ~~(b)~~ **(b)** — The WACC ~~shall~~ ~~must~~ ~~be~~ ~~computed~~ ~~calculated~~ ~~on~~ ~~on~~ a ~~p~~Pre-~~t~~Tax basis; ~~and~~
- ~~(c)~~ **(c)** — The WACC ~~shall~~ ~~must~~ ~~using~~ ~~use~~ the standard ~~o~~fficer WACC method as the basis of calculation.

(e)

~~2.9.7~~ ~~2.9.7~~ The pre-tax real ~~o~~ Officer WACC shall be calculated using the following formulae:

$$WACC_{real} = \left( \frac{(1 + WACC_{nominal})}{(1 + i)} \right) - 1 \quad \text{and}$$

$$WACC_{nominal} = \frac{1}{(1 - t(1 - \gamma))} R_e \frac{E}{V} + R_d \frac{D}{V}$$

Where:

~~(a)~~ ~~(a)~~  ~~$R_e$~~   ~~$R_e$~~  is the nominal return on equity (determined using the ~~CAPM~~ ~~Capital Asset Pricing Model~~) and is calculated as:

$$R_e = R_f + \beta_e \times MRP$$

Where:

$R_f$  is the nominal risk free rate for the Capacity Year;

$\beta_e$  is the equity beta; and

MRP is the market risk premium;

~~(b)~~ ~~(b)~~  ~~$R_d$~~   ~~$R_d$~~  is the nominal return on debt and is calculated as:

$$R_d = R_f + DM$$

Where:

~~$R_f$~~  is the nominal risk free rate for the Capacity Year;  
and

DM is the debt margin, which is calculated as the sum of the debt risk premium (DRP) and debt issuance cost;

~~(c)~~ ~~(c)~~  ~~$t$~~  is the benchmark rate of corporate income taxation, established at either an estimated effective rate or a value of the statutory taxation rate;

~~(d)~~ ~~(d)~~  ~~$\gamma$~~  is the value of franking credits;

~~(e)~~ ~~(e)~~  ~~$E/V$~~  is the market value of equity as a proportion of the market value of total assets;

~~(f)~~ ~~(f)~~  ~~$D/V$~~  is the market value of debt as a proportion of the market value of total assets;

~~(g)~~ ~~(g)~~  ~~$T$~~  the nominal risk free rate, for a Capacity Year is the rate determined for that Capacity Year by the IMO on a moving average basis from the annualised yield on Commonwealth Government bonds with a maturity of 10 years:

i. using the indicative mid rates published by the Reserve Bank of Australia; and

ii. ~~•~~ averaged over a 20-trading day period;

~~(d)(h)~~ ~~The debt risk premium, DRP, for a Capacity Year is a margin above the risk free rate reflecting the risk in provision of debt finance. This will be estimated by the IMO as the margin between the observed annualised yields of Australian corporate bonds which have a BBB (or equivalent) credit rating from Standard and Poors and the nominal risk free rate, using the ~~The IMO must bond-yield approach developed by the ERA. determine the methodology to estimate the DRP, which in the opinion of the IMO is consistent with current accepted Australian regulatory practice.~~~~<sup>4</sup>

~~(i)~~ ~~(i)~~ If there are no Commonwealth Government bonds with a maturity of 10 years on any day in the period referred to in step ~~2.9.7(g)~~2.9.7(g), the IMO must determine the nominal risk free rate by interpolating on a straight line basis from the two bonds closest to the 10 year term and which also straddle the 10 year expiry date~~;~~.

~~(j)~~ ~~(j)~~ If the methods used in step ~~2.9.7(i)~~2.9.7(i) cannot be applied due to suitable bond terms being unavailable, the IMO may determine the nominal risk free rate by means of an appropriate approximation; ~~and~~.

~~(k)~~ ~~(k)~~ i is the forecast average rate of inflation for the 10 year period from the date of determination of the WACC. In establishing a forecast of inflation, the IMO must have regard to the forecasts of the Reserve Bank of Australia and, beyond the period of any such forecasts, the mid-point of the Reserve Bank's target range of inflation.

~~2.9.8~~ 2.9.8 The CAPM must use the following parameters as variables each year:

CAPM Parameter	Notation/Determination	Review Frequency	Value
Nominal risk free rate of return (%)	<del><math>R_{Rf}</math></del>	Annual	TBD
Expected inflation (%)	i	Annual	TBD
Real risk free rate of return (%)	$R_{fr}$	Annual	TBD
Market risk premium (%)	MRP	5-Yearly	6.00
Asset beta	$\beta_a$	5-Yearly	0.5
Equity beta	<del><math>\beta_e</math></del> $\beta_e$	5-Yearly	0.83
Debt risk premium (%)	DRP	Annual	TBD
Debt issuance costs (%)	d	5-Yearly	0.125
Corporate tax rate (%)	t	Annual	TBD

<sup>4</sup> Given observed issues with Bloomberg data, the ERA has adopted an alternative 'Bond-Yield Approach' to establishing the DRP and has applied this since its Final Decision on revisions proposed by WA Gas Networks (WAGN) to the access arrangement for the Mid West and South West gas distribution systems in 2011. This methodology was broadly upheld on appeal to the Australian Competition Tribunal in June 2012. The IMO intends to amend this Market Procedure in the near future to implement the 'Bond-Yield Approach'.

Franking credit value	γ	5-Yearly	0.25
Debt to total assets ratio (%)	<del>D/VDA</del>	5-Yearly	40
Equity to total assets ratio (%)	<del>E/VEA</del>	5-Yearly	60

## 2.10 ~~2.10~~ Determination of the **MaximumBenchmark** Reserve Capacity Price

2.10.1 ~~2.10.1~~—The IMO must use the following formulae to determine the **MaximumBenchmark** Reserve Capacity Price:

$$\begin{aligned}
 & \text{MBRCP} \\
 &= \frac{\text{ANNUALISED\_FIXED\_O\&M} + \text{ANNUALISED\_CAPCOST}}{\text{CC}} - (\text{ANNUALISED\_FIXED\_O\&M} \\
 &+ \text{ANNUALISED\_CAPCOST} / \text{CC})
 \end{aligned}$$

Where:

(a) MBRCP is the **MaximumBenchmark** Reserve Capacity Price to apply in a Reserve Capacity Auction;

(b) ANNUALISED FIXED O&M is the annualised fixed O&M costs for a Power Station and any associated electricity transmission facilities determined in step ~~2.52.5~~ and expressed in Australian dollars, per MW per year.

(c) ANNUALISED CAPCOST is the CAPCOST, expressed in Australian dollars, annualised over a 15 year period, using thea Weighted Average Cost of Capital (WACC) as determined in step ~~2.92.9~~;

Where ~~the~~ the value of CAPCOST must be calculated as:

$$\begin{aligned}
 & \text{CAPCOST} \\
 &= ((\text{PC} \times (1 + \text{M}) + \text{TC}) \times \text{CC} + \text{FFC} + \text{LC}) \times (1 \\
 &+ \text{WACC})^{1/2 \Delta 1/2}
 \end{aligned}$$

Where:

PC is the capital cost of an open cycle gas turbine a pPower Sstation, expressed in Australian dollars per MW as determined in step ~~2.3~~2.3 for that location;

M is a margin to cover legal, approval, financing and other costs and contingencies as detailed in step ~~2.8~~2.8;

TC is the estimate of Total Transmission Costs as determined in step ~~2.4~~2.4;

CC is the expected Capacity Credit allocation determined in conjunction with Power Station costs in step ~~2.3.1(c)~~2.3.1(c);

FFC is the Fixed Fuel Cost as determined in step 2.6.2.6;

LC is the Land Cost as determined in step 2.7.2.7; and

WACC is the Weighted Average Cost of Capital as determined in step 2.9.2.9; and;

(d) CC is the expected Capacity Credit allocation determined in conjunction with Power Station costs in step 2.3.1(c)2.3.1(e).

;

CAPCOST is the total capital cost, expressed in million Australian dollars, estimated for an open cycle gas turbine power station of capacity CAP; and

ANNUALISED\_FIXED\_O&M is the annualised fixed operating and maintenance costs for a typical open cycle gas turbine power station and any associated electricity transmission facilities determined in step 2.5 and expressed in Australian dollars, per MW per year.

The value of CAPCOST must be calculated as:

$$\text{CAPCOST} = ((PC \times (1 + M) + TC) \times CC + FFC + LC) \times (1 + WACC)^{1/2}$$

Where:

PC is the capital cost of an open cycle gas turbine power station, expressed in Australian dollars per MW as determined in step 2.3 for that location;

M is a margin to cover legal, approval, financing and other costs and contingencies as detailed in step 2.8;

TC is the estimate of Total Transmission Costs as determined in step 2.4;

CC is the expected Capacity Credit allocation determined in conjunction with Power Station costs in step 2.3.1 (e);

FFC is the Fixed Fuel Cost as determined in step 2.6;

~~LC is the Land Cost as determined in step 2.7; and~~

~~WACC is the Weighted Average Cost of Capital as determined in step 2.9.~~

~~2.10.2~~ ~~2.10.2~~—Once the IMO has determined a revised value for the ~~MaximumBenchmark~~ Reserve Capacity Price, the IMO must publish a draft report describing how it has arrived at the proposed revised value and undertake consultation in accordance with clause ~~4.16.6~~ of the Market Rules. In preparing the draft report, the IMO must include details of how it has arrived at any proposed revised values for the ~~a~~Annual and ~~5~~Yearly components used in calculating the WACC.

~~2.10.3~~ ~~2.10.3~~—The IMO must publish any supporting consultant reports with the draft report on the Market Web Site.

~~2.10.4~~ ~~2.10.4~~—After considering any submissions on the draft report the IMO must propose a final value for the ~~MaximumBenchmark~~ Reserve Capacity Price and submit the ~~final~~ report to the ~~Economic Regulation Authority~~ERA (ERA) ~~of Western Australia~~ for its approval under clause 2.26.1 of the Market ~~Rules~~.

~~2.10.5~~ ~~2.10.5~~—Once the final value for the ~~MaximumBenchmark~~ Reserve Capacity Price, with any updates, has been approved by the ERA, the IMO must publish the final report and submissions as required by clause 4.16.7 of the Market Rules.

~~2.10.6~~ ~~2.10.6~~—The IMO must include the ~~MaximumBenchmark~~ Reserve Capacity Price in the ~~r~~Request for Expressions of Interest document which must be published by the date and time specified in clause 4.1.4 of the Market Rules.

## ~~2.11~~ ~~2.11~~ Major Review

~~2.11.1~~ ~~2.11.1~~—In accordance with clause 4.16.9 ~~of the Market Rules~~, the IMO must conduct a review of this Market Procedure containing the methodology used to determine the ~~MaximumBenchmark~~ Reserve Capacity Price at least once every five years (“Major Review”). This process will include a review of the basis for determining the ~~MaximumBenchmark~~ Reserve Capacity Price, the structural methodology by which the ~~MaximumBenchmark~~ Reserve Capacity Price is computed each year and the method the ~~IMO~~ uses to estimate each of the constituent components of the ~~MaximumBenchmark~~ Reserve Capacity Price.

~~2.11.2~~ ~~2.11.2~~—In conducting the annual review of the WACC, where the IMO considers that any of the comparator companies used in the most recent Major Review are no longer available or that their characteristics have significantly changed, the IMO may select a different set of comparator companies for determination of relevant WACC parameters, applying the following criteria:

- (a) the company must be a power generator, energy transmitter or distributor;
- (b) market capitalisation must be more than \$200 ~~million~~ AUD; and
- (c) the company must be listed on Bloomberg.