

IMPORTANT NOTICE

1. Purpose

(a) The purpose of Expressions of Interest is to provide the Independent Market Operator (IMO) with an indication from existing and potential new Market Participants of the amount of new generation and new Demand Side Management capacity they are willing to offer to make available as Reserve Capacity.

2. Precedence

- (a) Unless the context otherwise requires, the Market Rules take precedence over this Request for Expressions of Interest ("Request").
- (b) Where any conflict occurs between the provisions of the Market Rules and this Request, this Request will if required be read down to resolve the conflict. If the conflict remains incapable of resolution by reading down, the conflicting provisions shall be severed from this Request without otherwise diminishing the enforceability of the remaining provisions of this Request.

3. Cancellation and Variation

- (a) This Request has been prepared by the IMO using information available to the IMO at 29 January 2010.
- (b) The IMO reserves the right, at any time and from time to time, to cancel, vary, supplement, supersede or replace this Request or any part of this Request.
- (c) If the IMO cancels, varies, supplements, supersedes or replaces this Request, then:
 - i. the IMO will publish a notice to this effect on its website (it is the Proponent's responsibility to check for such notices); and
 - ii. the Proponent shall not have any recourse against the IMO, the State of Western Australia, Minister, any person acting on behalf of the State of Western Australia, or Minister, any director, officer or employee of any of the preceding, or any adviser or consultant to any of the preceding ("Relevant Persons") whatsoever including for claims for any costs or expenses incurred up to and including the date that the Request or any part of this Request is cancelled, varied, supplemented, superseded or replaced.

4. Agreement by Proponent

In submitting a proposal, the person or persons proposing to provide Reserve Capacity (each a "**Proponent**") represents and agrees that:

- (a) (information true and correct) all information in its proposal is true and correct;
- (b) (comply with conditions) it will comply with clauses 1 to 6 of this Important Notice;
- (c) (IMO not bound) other than as specified in the Market Rules:
 - i. this Request does not confer any obligations on the IMO; and
 - ii. the IMO is not required to undertake any further act in relation to this Request, or any act in relation to a proposal;
- (d) (relies on own enquiries) it relies entirely on its own enquiries in relation to all matters in respect of this Request and the Market Rules;
- (e) (understood Request) it has examined and understood this Request, each addendum issued under this Request, the Market Rules and any other information available to the Proponent in respect to this Request;
- (f) (made reasonable enquiries) it has examined all information relevant to the risks, contingencies and other circumstances having an effect on its proposal which is obtainable by the making of reasonable enquiries, which enquiries the Proponent has made;
- (g) (does not rely on warranties) it does not rely on any warranty or representation of a Relevant Person;
- (h) (no warranty as to accuracy) it acknowledges and agrees that no Relevant Person makes any warranty or representation, express or implied, in respect of the accuracy, reliability or completeness of this Request or any addendum issued or other information provided under or in connection with this Request;
- (i) (no unlawful arrangement) it has not entered into and will not enter into any unlawful arrangement with any other person in respect of this Request;
- (j) (own cost and expenses) it will pay its own costs and expenses in connection with:
 - i. the preparation and submission of its proposal; and
 - ii. any discussions, enquiries or negotiations with, or provision or consideration of further information to the IMO whether before or after the submission of any proposal; and
- (k) (liability) to the maximum extent permitted by law, no Relevant Person shall have any liability (whether arising from negligence, negligent misstatement, or otherwise) for or in connection with, or in connection with a person's use of or reliance on (including reliance on the currency, accuracy, reliability or completeness of), any statement, opinion, information or matter (express or implied) arising out of, contained in, derived from, or omitted from this Request.

5. IMO's rights

- (a) After 5pm on 3 May 2010, the IMO may request additional information from the Proponent in relation to the content of the proposal and if so requested, the Proponent must promptly provide such information to the IMO.
- 6. Disclosure of proposal
 - (a) Subject to this clause, the provisions of the provisions of the Freedom of Information Act 1992 (WA), and the provisions of the Market Rules, the IMO will not make public any information in a proposal that the Proponent expressly and reasonably nominates in its proposal as confidential, unless:
 - i. such information comes into the public domain other than by breach of this clause;
 - ii. the IMO is required by the ASX, court order, governmental agency, Parliament or a committee of Parliament, or law to disclose such information;
 - iii. it is necessary to disclose such information in relation to the discovery of documents, or any proceeding before a court, tribunal, ACCC, other governmental agency or stock exchange; or
 - iv. the IMO has written consent from the Proponent (which must not be unreasonably withheld) to disclose such information.
 - (b) The Proponent agrees and acknowledges that the powers and responsibilities of the Auditor General for the State under the Financial Administration and Audit Act 1985 (WA) are not affected in any way by this Request.
 - (c) By submitting a proposal, the Proponent releases each Relevant Person from all liability whatsoever for any loss, injury, damage, liability, costs or expense resulting from the disclosure of the proposal under this clause.

Contents Page

IMPORTANT NOTICE	1
Contents Page	2
Request for Expressions of Interest	3
Executive Summary	4
Introduction	5
Background to the Electricity Sector in Western Australia	5
Forecast Electricity Demand	6
Power Stations and Fuel Supply	8
Quantity of Capacity Required	10
The Reserve Capacity Mechanism	11
Introduction	11
Options that Proponents Can Offer	
Capacity Credits	
Certification of Facilities	15
Potential Changes and Rule Improvements	16
Assignment of Capacity Credits	17
Payment for Capacity Credits	17
Reserve Capacity Auction Price Cap	18
Special Price Arrangements	
Obligations on Facilities Receiving Capacity Credits	19
Proponent Requirements	
Appendix 1 Transmission Network Access	22
Appendix 2 Environmental Approvals	
Appendix 3 Expression of Interest Form	
Appendix 4 Results from Past Reserve Capacity Cycles	26
Appendix 5 Glossary of Key Terms	28

REPORT DETAILS

IMO Report No.: 40

Report Title: Wholesale Electricity Market: Request for Expressions of Interest for the

2010 Reserve Capacity Cycle

Version No.: 1.0.0 Release Status: Final Confidentiality Status: Public



Request for Expressions of Interest

The Independent Market Operator is seeking Expressions of Interest for the provision of new generating capacity and Demand Side Management within the South West Interconnected System of Western Australia.

Proponents may offer new generating capacity or Demand Side Management options.

New facilities must be available for commercial service by 1 October 2012.

Proponents will be invited to apply for certification of Reserve Capacity for their proposed facilities in May 2010.

Proponents whose proposed facilities are certified may apply in August 2010 for assignment of Capacity Credits.

The total capacity required to meet peak demand, plus a reserve margin, will be determined through the Long Term Projected Assessment of Supply Adequacy, the results of which will be published in the Statement of Opportunities Report in July 2010.

Based on current information, including current electricity demand estimates, there is an estimated need for 139 MW of additional capacity for the 2012/13 Capacity Year.

Queries and completed Expressions of Interest are to be sent to:

Manager Market Development and System Capacity

Independent Market Operator PO Box 7096 Cloisters Square PERTH WA 6850 AUSTRALIA

Proposals can be submitted electronically to system.capacity@imowa.com.au

Applicants must include the Expression of Interest form (available in Appendix 3 or on the following IMO webpage: www.imowa.com.au/eoi) as part of their submission.

All Expressions of Interest should be submitted by **5.00pm Western Standard Time on Monday, 3 May 2010**.



Executive Summary

This document invites proponents to provide Expressions of Interest for the provision of generation and Demand Side Management capacity into the South West Interconnected System (SWIS) in Western Australia. It is the first step in the 2010 Reserve Capacity Cycle to secure new capacity that will be available for service from October 2012 through to October 2013.

The main purpose of the Request for Expression of Interest is to alert prospective investors to the Reserve Capacity Mechanism and to enable proponents to provide information to the IMO on projects under consideration. Submitting an Expression of Interest will also ensure that the proponent receives all information and updates that are published in respect to the process, including the Reserve Capacity Information Pack.

In addition to submitting an Expression of Interest, project proponents are strongly encouraged to commence the processes required to secure access to the transmission system and to secure environmental approvals. Both of these processes are likely to be on the critical path of any new power project.

Currently, there is an estimated need for 138.514 MW of additional capacity for the 2012/13 Reserve Capacity Year. Developers are able to offer new capacity for certification during this Reserve Capacity Cycle, and under some conditions may be eligible to receive Capacity Credits for new Facilities.

For further information on any aspect of the Reserve Capacity Mechanism, proponents are encouraged to contact the Independent Market Operator (IMO) directly at system.capacity@imowa.com.au.



Introduction

Energy sales within the SWIS, which covers the populous south-west portion of Western Australia, are expected to grow at approximately 3.3% per annum, as projected in the 2009 Statement of Opportunities (SOO) forecasts. Growth in electricity peak demand is forecast at around 4.3% per annum, supported mainly by a high level of air conditioning penetration within the residential sector.

The publication of this Request for Expressions of Interest is the beginning of the sixth Reserve Capacity Cycle. Expressions of Interest are invited from prospective generation and Demand Side Management proponents for the provision of capacity which will be available for commercial service from between 1 June 2011 and 1 October 2012 through 1 October 2013¹. Expressions of Interest are due to the IMO by 3 May 2010.

Background to the Electricity Sector in Western Australia

Western Australia is geographically large, covering approximately one third of the Australian continent, and the electricity supply industry comprises a number of distinct systems serving the more populous areas. The two main systems are:

- the SWIS, supplying the south west of the State and communities north to Kalbarri, south to Albany and east to the Goldfields; and
- the North West Interconnected System (NWIS), which supplies major towns in the Pilbara Region.

With an annual energy consumption of about 17,000 GHz, the SWIS is by far the largest electricity system in Western Australia and provides electricity to approximately 950,000 end use customers, the majority of whom are located in the Perth metropolitan area.

This Request for Expressions of Interest, and the information provided in respect to the Wholesale Electricity Market, relates to the SWIS.

¹ Note that the date for the entry into the Reserve Capacity Mechanism was amended from 30 November to 1 October for Reserve Capacity Cycles from 2010 onwards. Further details of the applicable rule change are available on the following webpage: http://www.imowa.com.au/RC 2009 11



Figure 1 Western Australia and the South West Interconnected System

Forecast Electricity Demand

The maximum demand in the SWIS occurs in summer, with the peak strongly influenced by the specific weather circumstances. Forecasts of peak demand are prepared on the basis of three defined probability standards:

- A 10% probability of exceedance (PoE) forecast is one that is not expected to be exceeded more than once in every ten years;
- A 50% PoE forecast, which is not expected to be exceeded more than once in every two years; and
- A 90% PoE forecast, which is not expected to be exceeded more than nine times in every ten years.

The 10% POE system peak demand for 2012/13 is forecast at 5,132 MW and is expected to grow at around 4.3% per annum over the next ten years as shown in Figure 2 below.



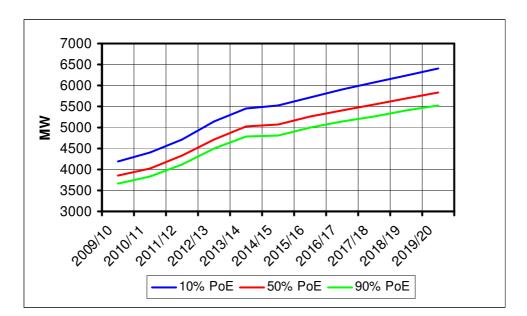


Figure 2 Forecast Maximum Demand (MW)

A number of mining and mineral processing loads, which are supplied by on-site generation, are also connected to the system. The full magnitude of these loads is not included in the SWIS forecasts, but an allowance is made for their reserve share as intermittent loads.

Electricity sales are forecast to grow at a lower rate to peak demand, with demand becoming more peaked. In particular, electricity sales are forecast to grow at approximately 3.3% per annum on average over the next ten years, though this will depend on the general level of economic growth within the State. Figure 3, below, shows the forecast growth in sent out energy for a range of economic growth forecasts.



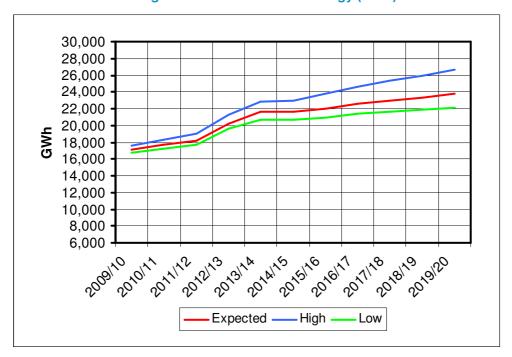


Figure 3 Forecast sent out energy (GWh)

More information on the IMO demand forecasts can be found in the Statement of Opportunities Report available on the following website: http://www.imowa.com.au/soo

Power Stations and Fuel Supply

Western Australia possesses an abundant supply of fossil fuel resources, particularly coal and gas. In addition, Western Australia has generous supplies of renewable energy sources. Solar energy and wind are plentiful and there are a number of locations throughout the SWIS suitable for generating electricity using other renewable energy resources, such as wave and biomass.

Figure 4 below shows the levels of capacity by fuel type for the 2005/06 through 2011/2012 Capacity Years. These diagrams show the proportion of Capacity Credits by fuel type, where the Capacity Credit is a notional construct for capacity used in the Wholesale Electricity Market.



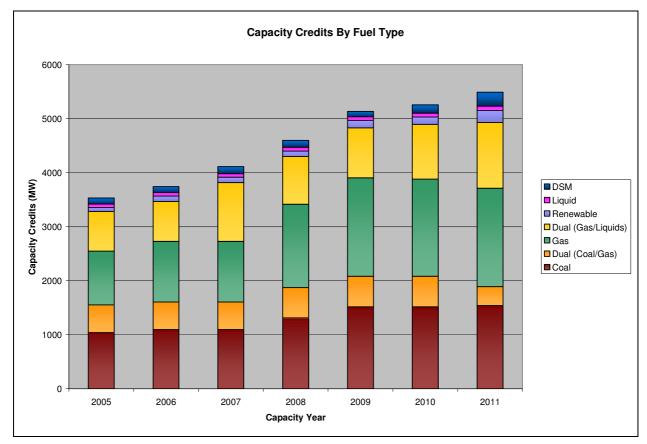


Figure 4 Proportion of generation capacity (by Capacity Credits) using various fuels

Note: A significant proportion of generating capacity is primarily fuelled by gas but is also able to operate on distillate.

Figure 4 shows that generation capacity in the SWIS is mainly provided by coal and gas fired plant with the balance provided by liquid fuels and renewable sources such as wind and landfill gas. There is also a small but significant portion of Demand Side Management capacity receiving Capacity Credits in the Wholesale Electricity Market.

Figure 5 below, shows that by 2011/12 Verve Energy is expected to provide around 57% of the total SWIS generation capacity, compared to 90% when the Market Started and 61% in 2009/10. Government is keen to encourage investment and diversity within the Wholesale Electricity Market and has placed a cap on the level of capacity that Verve Energy may own. This investment cap means that the proportion of independent capacity will increase over time.



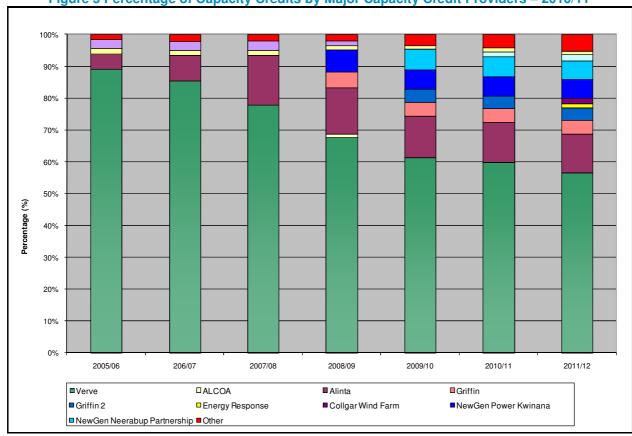


Figure 5 Percentage of Capacity Credits by Major Capacity Credit Providers - 2010/11

The provision of secure fuel supplies for power generation facilities is one of the critical elements to the continued reliability of electricity supply within the SWIS. Firm fuel supply contracts (including transport capability in the case of gas fuelled projects) are required for projects to have their capacity certified. Certification of Reserve Capacity is the first step required for a Market Participant to receive Capacity Credits for its generation plant or DSM facility.

Quantity of Capacity Required

Preliminary estimates for the 2012/13 Capacity Year are that the Reserve Capacity Requirement will be 5,632 MW. This is based on the current Planning Criteria which includes an allowance for capacity to meet forecast peak demand, the loss of the largest generating unit, demand from intermittent loads, and an ability to maintain frequency keeping capability.

Figure 6 shows that approximately 5,233 MW of generating capacity is expected to be in service for 2012/13. In addition, Demand Side Management is expected to provide approximately 260 MW. Thus, based on the number of Capacity Credits assigned for 2011/12, there is likely to be a requirement for an additional 139 MW of capacity to cover the requirement for 2012/13. The



IMO anticipates that all of this Capacity will be provided through Market Participants choosing to trade Certified Reserve Capacity Bilaterally.

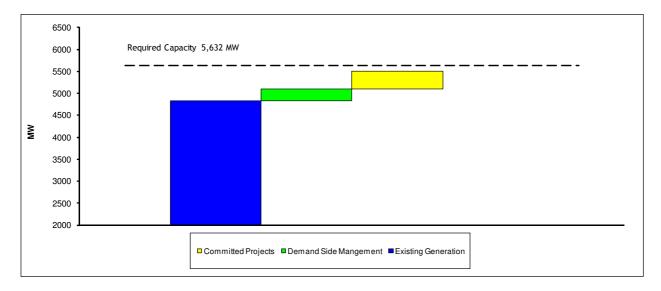


Figure 6 Projected Plant Balance - 2010/11

The predicted capacity deficit is determined from the Capacity Credits assigned in the 2009 Reserve Capacity Cycle (for the 2011/12 Capacity Year). It is likely that the required quantity will vary due to changes in forecast electricity demand, commitments to new plant that are currently being considered by Market Participants and/or new Demand Side Management initiatives. Proposed projects will be included in future determinations of the demand/supply balance based on data gathered through this Request for Expression of Interest process. These will be detailed within the future Statement of Opportunities Report.

The Reserve Capacity Mechanism

Introduction

One of the major requirements in developing an electricity market is to ensure that system reliability and security is maintained at an appropriate level. This issue is of particular importance in an isolated system such as the SWIS, where it is not possible to draw power supplies from adjacent systems.

The Reserve Capacity Mechanism is designed to facilitate the procurement of adequate generation and Demand Side Management capacity. It incentivises investment by providing tangible value for the provision of capacity.

A summary timeline for the process is shown in Figure 7 and the process is described in more detail below.



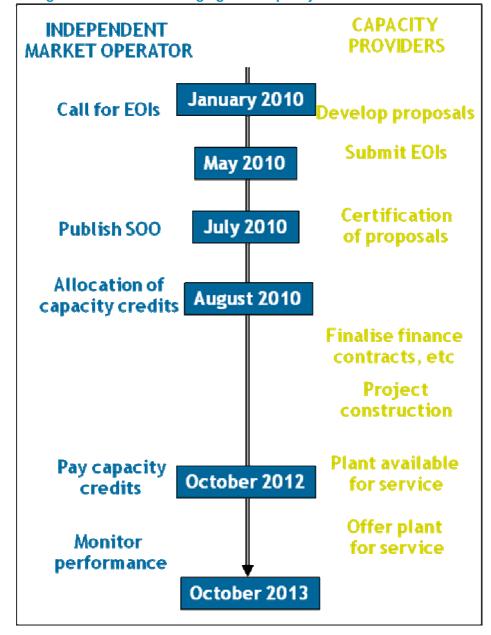


Figure 7 Timeline for Bringing New Capacity to the SWIS for 2010/11

The Reserve Capacity Mechanism provides the opportunity for generators to enter contracts to supply their capacity to retailers or other wholesale electricity purchasers. It is expected that in most years these contractual arrangements, or bilateral contracts, will encourage sufficient new capacity onto the SWIS to meet demand. However, in the event that the level of expected bilateral trades does not meet the capacity requirement, the IMO will conduct a Reserve Capacity Auction to secure additional supply.



Options that Proponents Can Offer

The Reserve Capacity Mechanism is open to Demand Side Management options as well as a range of generation plant. The IMO does not discriminate as to the type of facilities offered and proposals for peaking, mid-merit or base load plant will be considered provided that they can meet the timing restrictions set out in the Wholesale Electricity Market Rules (Market Rules) and meet all other requirements of the Reserve Capacity Mechanism.

Capacity Credits

The Reserve Capacity Mechanism is based around the trade of "Capacity Credits", a notional construct representing either generation or Demand Side Management capacity. All Capacity Credits provided by Scheduled Generators are measured on a sent-out basis at 41 degrees Celsius.

Each year, the IMO prepares an assessment of the annual capacity that it estimates will be required over the coming ten year period. This assessment determines the capacity required to meet the forecast system peak demand while ensuring that the system reliability criteria are met. This information is published in July each year within the Statement of Opportunities Report. The 2009 Statement of Opportunities Report is available on the IMO website at www.imowa.com.au/soo.

The IMO has estimated that 5,632 MW of generation and Demand Side Management capacity will be required during the 2012/13 Capacity Year, which extends from 1 October 2012 to 1 October 2013. The IMO will place an obligation on retailers to fund these 5,632 MW of Capacity Credits based on their consumption at system peak times in the previous year. Each retailer will be obliged to secure adequate Capacity Credits to meet its Individual Reserve Capacity Requirement (IRCR). Retailers can either purchase Capacity Credits through bilateral arrangements or through the IMO. Figure 8 shows the energy and capacity arrangements that may exist between buyers and sellers.



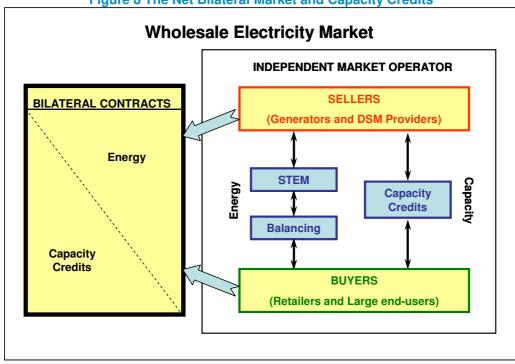


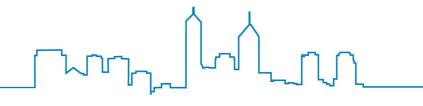
Figure 8 The Net Bilateral Market and Capacity Credits

A Capacity Credit payment is made to generators and Demand Side Management providers in return for making their capacity available to the system. There are a number of obligations imposed on providers, the most significant being that capacity must be offered to the system at all times, unless it is undergoing an approved outage. In the event that capacity is not offered to the system, such as during a forced outage, the holder of the Capacity Credits is required to refund payments to the market.

In keeping with the overall design of the market, it is anticipated that most Capacity Credits will continue to be traded through bilateral contract arrangements. The terms and conditions of bilateral contracts are negotiated between the generators and retailers and may vary in term, price and quantity. Just as they may represent longer-term or short-term agreements, these contracts may also be for the supply of energy or Capacity Credits or both.

Any remaining Capacity Credits that are not traded through bilateral contracts will be bought and sold through the IMO.

Capacity Credits have significant value. The Maximum Reserve Capacity Price for the 2012/13 Reserve Capacity Year is \$238,500 per MW per year.



Certification of Facilities

The reliability of the SWIS depends on generators and Demand Side Management providers delivering the capacity when it is required. The IMO undertakes a process of certification to ensure that:

- the facility will be able to deliver the quantity of megawatts which the Market Participant has applied for; and
- the facility can supply power into the SWIS by the date claimed if it is yet to commence operation.

From Monday, 3 May 2009 through to Tuesday, 20 July 2009, a Market Participant may apply to the IMO to have the capacity of its plant certified for the purposes of the Reserve Capacity Mechanism. The Market Participant has to demonstrate that its Facility will be able to deliver capacity into the SWIS within the required timeframe. The timeframes for first date of delivery are:

- 1 October 2012 for existing Facilities; or
- 1 June to 1 October 2012 for new Facilities.

The level of Certified Reserve Capacity granted to the Facility will be the level of Capacity Credits that the Facility may be assigned by the IMO; either through the bilateral trade declaration process or through the Reserve Capacity Auction if one is held.

On 1 February 2010 the Early Certified Reserve Capacity (ECRC) rule change will commence. This rule change will allow new projects with long lead times the ability to secure Capacity Credits earlier and provide greater certainty for investors. Facilities applying for ECRC cannot register an Expression of Interest for the 2012/13 Reserve Capacity cycle. For more information on this rule change and how it will effect Capacity Credit allocations please refer to the final rule website change report which be found the IMO can on at www.imowa.com.au/f249.87592/RC 2009 10 FinalRuleChangeReport.pdf

Clauses 4.9 through 4.11 of the Market Rules describe the process for applying for and setting of Certified Reserve Capacity. Further information, including the procedures to be followed, is available on the IMO website.

Information that must be provided by the applicant for certification includes:

- Details of the facility;
- Capacity at 41 degrees celsius and the temperature dependence of capacity;



- Key project dates;
- Information and evidence on fuel supplies; and
- Information on projected outage rates.

Experience in Western Australia suggests that access to the transmission system and environmental clearance are on the critical path for projects. The Market Rules place two key requirements on the certification of Reserve Capacity for facilities that have not yet entered service:

- The facility must have a letter from the network operator indicating that it has made an
 offer of access in respect of the project and that the facility will be entitled to have
 access from the service date nominated by the developer; and
- Evidence must be provided that any necessary environmental approvals have been granted or are expected to be granted by the proposed service date.

In addition to this, the IMO wishes to note the importance of proponents ensuring adequate fuel supply and transport provisions have been established prior to applying for Certified Reserve Capacity. Project proponents, and those wanting to re-certify their facilities, must comply with the relevant sections of the Market Rules and associated Market Procedures in regards to fuel supplies. The main provision is that a Market Participant must be able to demonstrate it has access to firm fuel supply and transport arrangements so that the Facility can operate at maximum output for 14 hours each day.

Certification is required to be completed each year in order for a facility to be able to apply for Capacity Credits.

Potential Changes and Rule Improvements

There are currently a number of proposed Rule improvements under consideration in the rule change mechanism provided for under the Market Rules. These potential changes relate to:.

- The review and implementation of any recommendations that come out of the Verve Energy Review Implementation Project;
- Fuel provisions and requirements; and
- Renewable generation certification and requirements.



For more information on these Rule changes please refer to the IMO website (www.imowa.com.au) or contact the IMO System Capacity team at system.capacity@imowa.com.au.

Assignment of Capacity Credits

Following successful certification, the IMO assigns Capacity Credits to facilities through a twostage process. The first stage is through a bilateral trade declaration process where a Market Participant declares to the IMO that its intention is to hold bilateral contracts for trading its Reserve Capacity.

In respect of Bilateral Trade Declarations, the IMO assigns Capacity Credits to facilities in accordance with a priority set out in the Market Rules. Capacity Credits are first assigned to all generators which are in existence, or are Committed, and which have indicated their intention to trade their capacity bilaterally. If this quantity of capacity is sufficient to meet the Reserve Capacity Requirement, no further Capacity Credits are assigned. However, if the required capacity level has not been reached, the IMO will then assign Capacity Credits to facilities where the Market Participant has indicated its intention to trade capacity bilaterally, but where construction has not yet commenced. If further capacity is still required, the IMO will run a Reserve Capacity Auction.

An application to be assigned Capacity Credits through the Bilateral Trade Declaration process or through the Reserve Capacity Auction must be made by Monday, 10 August 2010. Note that participants are only required to declare that they intend to bilaterally trade their Capacity Credits; they do not actually have to have bilateral contracts in place when making this submission.

Payment for Capacity Credits

Proponents whose facilities are cleared as bilateral trades, or in the Reserve Capacity Auction, will be allocated Capacity Credits and may receive payments for these, either through bilateral contracts or through the IMO. Please note that there is no guarantee that this plant will be dispatched in the energy market.

If it is necessary for the IMO to run a Reserve Capacity Auction, participants who have indicated that they wish to enter the auction are able to bid any price between zero and the Maximum Reserve Capacity Price. For the 2011/12 Reserve Capacity Year the Maximum Reserve Capacity Price is \$238,500 per MW per year. The Reserve Capacity Auction will be cleared at a single price and this price will apply for all Capacity Credits. This includes any Capacity Credits that have been assigned during the Bilateral Trade Declaration process described above in the circumstances where these are uncontracted.

However, if a Reserve Capacity Auction is not held because enough capacity has been secured through bilateral trade nominations, the Market Rules set the price of all Capacity Credits based



on a scale which takes into account any oversupply of Capacity Credits above the required level. Details surrounding the Capacity Credit price adjustment can be found in clause 4.29.1 of the Market Rules.

Table 1 shows the prices for Capacity Credits to October 2011. The actual price of Capacity Credits for the Reserve Capacity Year will depend on whether a surplus is procured through bilateral trades, or if the Reserve Capacity Mechanism progresses to a Reserve Capacity Auction.

Start Date End Date Maximum Capacity Capacity Reserve **Credit Price Credit Price** Capacity per MW per per MW per Price Year Month \$10,625.00 1 Oct 2008 \$127,500.00 21 Sept 2007 \$150,000 \$8,152.90 1 Oct 2008 1 Oct 2009 \$122,500 \$97,834.00 \$9.038.20 1 Oct 2009 1 Oct 2010 \$142,200 \$108,458.00 \$144,235.00 \$12,019.60 1 Oct 2010 1 Oct 2011 \$173,400 \$10,983.72 1 Oct 2011 1 Oct 2012 \$164,100 \$131,804.58 TBA **TBA** 1 Oct 2012 1 Oct 2013 \$238,500

Table 1 Capacity Credit Prices in the Wholesale Electricity Market

The Capacity Credit payments will be made in 12 monthly payments equal to the number of Capacity Credits held by the Market Participant multiplied by the price per Capacity Credit as described above.

Reserve Capacity Auction Price Cap

There is a cap on offers into the Reserve Capacity Auction. The cap is set having regard to the capital and fixed operating costs of a peaking plant that may run only during occasional periods of very high system demand. For this Reserve Capacity Cycle, the cap has been set at \$238,500 per MW per year.

Participants may offer plant into the Reserve Capacity Auction that has a higher capital cost than is used as the basis for calculating the Reserve Capacity Auction price cap, but their offers must still be at or below the level of the cap. It would be expected that such plant would seek to recover the balance of their fixed costs through selling electricity within the energy market.

Special Price Arrangements

If a Reserve Capacity Auction is held, new capacity that is cleared in that auction will have the option to take up a Special Price Arrangement. A Special Price Arrangement allows a Market Participant to receive the auction price, including an adjustment for inflation, for up to ten years



from commissioning without being required to participate in the Reserve Capacity Auction again. This provides revenue certainty for new entrant generators.

If an auction is held, a Market Participant who has been assigned Capacity Credits through the Reserve Capacity Auction must nominate that it wishes to take up the option of the Special Price Arrangement no later than Monday 20 December 2010, approximately two months after the Reserve Capacity Mechanism results are published. Special Price Arrangements are only available for new plant if a Reserve Capacity Auction is held.

Obligations on Facilities Receiving Capacity Credits

To facilitate the achievement of power system reliability and security standards of the Reserve Capacity Mechanism, all facilities that have been assigned Capacity Credits are obliged to offer their capacity into the energy market at all times. Facilities can achieve this either through having commitments to supply energy under bilateral contracts to retailers (or directly to large loads), or through making an offer into the Short Term Energy Market.

Apart from approved outage periods, a facility that fails to meet this obligation will be required to make a refund to the market in accordance with clause 4.26 of the Market Rules.

Facilities are also required to:

- Participate within the centralised maintenance planning arrangements;
- Accept dispatch instructions from System Management; and
- Submit to regular facility tests undertaken by the IMO.

Proponent Requirements

Submitting an Expression of Interest

To submit an Expression of Interest, the proponent is required to develop an outline of a proposal for a specific generating plant, or a specific Demand Side Management response, at a defined location.

The proponent must then submit an Expression of Interest by 5.00pm, Monday 3 May 2010 Western Australian Standard Time, as required by clause 4.1.5 of the Market Rules.

The Expression of Interest submission must also include a completed Expression of Interest Form which can be found in Appendix 3. A copy of this form is also provided in Microsoft Excel format on the IMO website (www.imowa.com.au/eoi).

Expressions of Interest are to be sent to:



Manager Market Development and System Capacity

Independent Market Operator P O Box 7096 Cloisters Square PERTH WA 6850 AUSTRALIA

Proposals can be submitted electronically to system.capacity@imowa.com.au

Details on the Market Rules can be found on the following webpage: http://www.imowa.com.au/rule-changes

Certification of Reserve Capacity

Applications for Certified Reserve Capacity may be lodged with the IMO from Monday, 3 May 2010 until Tuesday 20 July 2010 in accordance with clause 4.9.1 of the Market Rules. In accordance with clause 4.9.3, a Market Participant applying for Certified Reserve Capacity must provide to the IMO the data specified in clause 4.10.1.

In the case of an application for Certified Reserve Capacity for an intermittent generator that is yet to enter service, the Market Participant must also provide to the IMO the independent expert report described in clause 4.10.3 of the Market Rules.

Procedures outlining the steps that proponents are required to follow are available from the IMO web site. Potential investors are also advised to read the 'Guide for Potential Investors' document available on the IMO's website (www.imowa.com.au).



Table 2 Timetable for the 2010 Reserve Capacity Cycle

2010 Reserve Capacity Mechanism - Timetable				
Friday	29 January 2010	5.00PM	IMO Publish Request for Expressions of Interest (EOI)	
Monday	3 May 2010	5.00PM	Close of EOI.	
Monday	17 May 2010	5.00PM	Announcement of the results of the EOI.	
Monday	3 May 2010	9.00AM	Participants may apply for Certification of Reserve Capacity.	
Thursday	1 July 2010	5.00PM	IMO issues a new Statement of Opportunities.	
Thursday	1 July 2010	5.00PM	IMO releases Reserve Capacity Information Pack.	
Thursday	15 July 2010	5.00PM	Publish Reserve Capacity Information Pack on website.	
Tuesday	20 July 2010	5.00PM	Applications for Certification of Reserve Capacity close.	
Thursday	5 August 2010	5.00PM	IMO advises assignment of Certified Reserve Capacity.	
Tuesday	10 August 2010	5.00PM	Market Participants provide security deposits if they intend to bilaterally trade.	
Tuesday	10 August 2010	5.00PM	Market Participants advise how much of their Certified Reserve Capacity will be traded bilaterally and how much will be offered into the auction.	
Wednesday	11 August 2010	5.00PM	IMO confirms to Market Participants the amount of certified bilateral capacity that can be traded bilaterally from sources that are not available in all hours of the year.	
Wednesday	18 August 2010	5.00PM	IMO advises whether a Reserve Capacity Auction is required.	
Friday	20 August 2010	9.00AM	Lodgement of reserve capacity offers opens (if auction required).	
Friday	27 August 2010	5.00PM	Lodgement of reserve capacity offers closes (if auction required).	
Friday	27 August 2010	5.00PM	Market Participants provide security deposits if they intend to enter into Auction.	
Wednesday	1 September 2010	5.00PM	IMO runs the Reserve Capacity Auction (if required)	
Wednesday	1 September 2010	5.00PM	IMO Publishes Reserve Capacity Auction results (if required)	
Monday	20 December 2010	5.00PM	Market Participants advise IMO how many capacity credits each facility will provide	
Monday	20 December 2010	5.00PM	Market Participants notify IMO of any long-term special price arrangements to be accepted.	
Thursday	23 December 2010	5.00PM	IMO returns security deposits to facilities that have not secured capacity credits in the auction.	



Appendix 1 Transmission Network Access

Proponents participating in the Expressions of Interest process do not need to have secured an agreement with Western Power for access to the electricity network.

However, proponents will be required to have a letter of access offer before their facilities can receive Certified Reserve Capacity. The letter from the Network Operator must indicate that it has made an Access Offer in respect of the Facility and that it will be entitled to have access within the timelines identified in the application for Certification of Reserve Capacity.

The actual timeframe for a proponent to receive a letter of offer from the Network Operator, as is required under clause 4.10.1(c)i of the Market Rules, may vary depending on the project and the existing queue of applicants. In some instances, the amount of time it takes to receive access to the transmission system may be substantially longer than the two year time horizon of the Reserve Capacity Mechanism. For this reason, the IMO strongly encourages project proponents to contact Western Power as early as possible to ensure their project can progress through the Reserve Capacity Mechanism.



Appendix 2 Environmental Approvals

Clause 4.10.1 of the Market Rules refers to the environmental approval requirements and the need for project proponents to have arrangements in place when submitting an application for Certified Reserve Capacity. This reflects a relatively tight timeframe between the running of the Reserve Capacity certification process and the required service date for new facilities.

It should be noted that environmental approval is not required to submit an Expression of Interest.

Proponents must refer their projects to the Environmental Protection Authority (EPA) as the first step in securing environmental approvals.

The EPA provides a substantial amount of information on its website at www.epa.wa.gov.au and proponents are strongly encouraged to read this.

It should be noted that the EPA will require sufficient time to assess all documentation received from proponents and makes a recommendation to the Minister for the Environment. The Minister will then require time to consider this recommendation and make a formal decision.



Appendix 3 Expression of Interest Form

PROPONENT DETAILS	
Name of proponent	
Contact person	
Contact person's position	
Address	
Phone	
Email	
Fax	
FACILITY DETAILS	
Name of Facility	
Location	
Capacity (at 41°C)	
Is the facility: (Please tick the appropriate option)	 ☐ An intermittent generator. ☐ A non-intermittent generator serving an intermittent load. ☐ A non-intermittent generator not serving an intermittent load. ☐ A form of demand side management.
Primary fuel to be used in the facility	
Quantity of primary fuel expected to be available to the facility	
Back-up fuel to be used by the facility	
Quantity of back-up fuel expected to be available to the facility	
Hours during a typical week when the facility will not be available to be dispatched	

CONSTRUCTION AND APPROVALS	
Expected earliest date that the facility will be available to be fully operational	
Offer for network access: (Please tick the appropriate option)	Has been made by Western Power Networks. Has been applied for and is being processed. Has not been applied for.
Environmental approvals: (Please tick the appropriate option)	Have been granted. Have been applied for and are being processed. Have not been applied for.



Appendix 4 Results from Past Reserve Capacity Cycles

The following information is presented in accordance with clause 4.3.1(c) of the Market Rules. Table A1 details Capacity Credits information for the Reserve Capacity Cycles and Table A2 shows availability curve information. Table A2 shows both the availability curve and the Demand Side Management opportunity information.

Table A1 Capacity Credit Information

Item	2009/2010	2010/2011	2011/12
Reserve	4,609 MW	5,146 MW	5,191 MW
Capacity			
Requirement			
Reserve	No Auction	No Auction	No Auction
Capacity Auction			
Requirement			
Number of	5,136.4 MW	5,258.55 MW	5,493.486 MW
Capacity Credits			
Acquired by IMO			
Maximum	\$142,200 per MW per	\$173,400 per MW per	\$164,100 per MW per
Reserve	year	year	year
Capacity Price			
Reserve	\$108,458.57 per MW	\$144,235.38 per MW	\$131,804.58 per MW
Capacity Price	per year	per year	per year
Monthly Reserve	\$9,038.21 per MW	\$12,019.62 per MW per	\$10,983.72 per MW
Capacity Price		year	per year



Table A2 Availability Curve Data

Availability Curve Data	2009/2010	2010/2011	2011/12
Availability Curve			
- at least 24 hours in the year	4,609 MW	5,146 MW	4,171 MW
- at least 48 hours in the year	4,480 MW	5,095 MW	4,068 MW
- at least 72 hours in the year	4,441 MW	5,011 MW	3,953 MW
- at least 96 hours in the year	4,404 MW	4,905 MW	3,925 MW
Demand Side Management			
Opportunities by Class			
1. 24 to 48 hours in the year	129 MW	51 MW	1,123 MW
2. 48 to 72 hours in the year	39 MW	84 MW	114 MW
3. 72 to 96 hours in the year	37 MW	106 MW	29 MW
4. 96+ hours in the year	4,404 MW	4,905 MW	3,925 MW

The information presented in the Demand Side Management opportunities section of Table A2 shows the maximum amount of Demand Side Management that can be procured within each Availability Class before the SWIS would experience energy delivery problems. It is noted that the figures presented for each year are those used in that relevant Reserve Capacity Cycle. The latest Availability Curve can be found in the Statement of Opportunities Report.

Demand Side Management procured within a higher Availability Class can also be used to contribute to the requirements of a lower Availability Class. Availability Class 1 (96+ hours in the year) represents a higher class than Availability Class 2 (72 to 96 hours in the year), and so on.



Appendix 5 Glossary of Key Terms

Availability Class: Any one of four classes of annual availability of Reserve Capacity set out in clause 4.5.12(c) of the Market Rules, where each class corresponds to Reserve Capacity being available from a Facility for not more than a specified number of hours per year.

Balancing: The process for meeting supply and consumption deviations from contracted bilateral and STEM positions in each Trading Interval.

Base Load Plant: Generating plant that is generally scheduled to operate continuously except for reductions in output for maintenance.

Bilateral Contract: A contract formed between any two persons (excluding the IMO and System Management) for the sale of electricity by one of those persons to the other.

Capacity Credit: A notional unit of Reserve Capacity provided by a Facility during a Capacity Year. The total number of Capacity Credits provided by a Facility is determined in accordance with clause 4.20, 4.28B or 4.28C of the Market Rules. Each Capacity Credit is equivalent to 1 MW of Reserve Capacity.

Certified Reserve Capacity: For a Facility it is the quantity of Reserve Capacity that the IMO has assigned to the Facility for the Reserve Capacity Cycle. Certified Reserve Capacity assigned to a Facility registered by a Market Participant is held by that Facility.

Curtailable Load: A Load through which electricity is consumed where such consumption can be curtailed at short notice in response to a request from System Management to the party managing the Load.

Demand Side Management: A type of capacity held in respect of a Facility connected to the SWIS; specifically, the capability of a Facility connected to the SWIS to reduce its consumption of electricity through the SWIS, as measured at the connection point of the Facility to the SWIS.

Dispatch Instruction: A direction from System Management to a Generating Facility or Demand Side Management Facility to increase, decrease or otherwise vary its production or consumption of electricity.

Dispatchable Load: A Load, with a rated capacity of not less than 0.2 MW, through which electricity is consumed where such consumption can be increased or decreased to a specified level upon instruction to do so by System Management to the person managing the Load.

Early Certified Reserve Capacity: Reserve Capacity which is certified and assigned to a new Facility by the IMO for a future Reserve Capacity Cycle under clause 4.28C of the Market Rules.



Environmental Approval: In respect of a Facility is a licence, consent, certificate, notification, declaration or other authorisation required under any law relating to the protection or conservation of the environment for the lawful construction of the Facility or the development of the site on which the Facility is to be constructed.

IMO: The Independent Market Operator, established under the Wholesale Electricity Market Regulations to administer and operate the Wholesale Electricity Market.

Individual Reserve Capacity Requirement: The MW quantity determined by the IMO in respect of a Market Customer, in accordance with clause 4.28.7 and, if applicable, as revised in accordance with clause 4.28.11.

Intermittent Generator: A Non-Scheduled Generator that cannot be scheduled because its output level is dependent on factors beyond the control of its operator (e.g. wind).

Interruptible Load: A Load through which electricity is consumed, where such consumption can be curtailed automatically in response to a change in system frequency.

Load Forecast: An expectation of the demand levels in the SWIS or in a region of the SWIS in future Trading Intervals.

Long Term Special Price Arrangement: A Special Price Arrangement that applies for more than one Reserve Capacity Cycle.

Market Rules: The set of rules which govern the operation of the Wholesale Electricity Market being the *Wholesale Electricity Market Amending Rules (September 2006)* and any subsequent amendments.

Mid-Merit Plant: Generating plant that generally operates during periods of medium and high demand.

Minister for Energy: The Minister responsible for administering the *Electricity Industry Act* 2004.

Network Operator: Network Operator: A person who is registered as a Network Operator, in accordance with clause 2.28.2, 2.28.3 or 2.28.4 of the Market Rules.

Non-Dispatchable Load: A Load which is not a Dispatchable Load, a Curtailable Load or an Interruptible Load, and is therefore self scheduled.

Peaking Plant: Generating plant that is generally operated only at times of high system demand.



Power System Reliability: The ability of the SWIS to deliver energy within reliability standards while maintaining Power System Adequacy and Power System Security.

Power System Security: The ability of the SWIS to withstand sudden disturbances, including the failure of generation, transmission and distribution equipment and secondary equipment.

Reserve Capacity: Capacity associated with a Facility. Capacity may be:

- i. the capacity of generation systems to generate electricity and send it out into a network forming part of the SWIS; or
- ii. Demand Side Management, being the capability of a Facility registered by the Market Customer at a connection point to a Network forming part of the SWIS to reduce the consumption of electricity at that connection point.

Reserve Capacity Auction: The process for determining the Reserve Capacity Price for a Reserve Capacity Cycle and the quantity of Reserve Capacity scheduled by the IMO for each Market Participant.

Reserve Capacity Auction Requirement: The quantity of Reserve Capacity, calculated in accordance with clause 4.15.2(b) of the Market Rules, which is the target quantity to be procured in a Reserve Capacity Auction.

Reserve Capacity Information Pack: A package of information, including the information described in clause 4.7.3 of the Market Rules, pertaining to a Reserve Capacity Auction.

Reserve Capacity Mechanism: The processes through which the IMO determines the required capacity to be available to the SWIS and ensures that this capacity is provided. The Reserve Capacity Mechanism is covered by Chapter 4 of the Market Rules.

Reserve Capacity Obligations: The obligations determined in accordance with clause 4.12 of the Market Rules which are placed on a Market Participant holding Capacity Credits.

Reserve Capacity Target: In respect of a Capacity Year, the IMO's estimate of the total amount of generation or Demand Side Management capacity required in the SWIS to satisfy the Planning Criteria for that Year.

Scheduled Generator: A generation system that can increase or decrease the quantity of electricity it generates and sends out into a network forming part of the SWIS (subject to limits on its physical capabilities) in response to instructions from System Management.

Short Term Energy Market (STEM): A forward market operated under Chapter 6 of the Market Rules in which Market Participants can purchase electricity from, or sell electricity to, the IMO.



South West Interconnected System (SWIS): The interconnected transmission and distribution systems, generating works and associated works located in the south west of Western Australia and generally extending between Kalbarri, Albany and Kalgoorlie.

Special Price Arrangement: An arrangement whereby a Market Participant can secure a price for Reserve Capacity that may differ from the Reserve Capacity Price.

System Management: A segregated business unit of Western Power Corporation responsible for dispatching the power system.

Wholesale Electricity Market: The market established under Section 122 of the *Electricity Industry Act 2004*.

