

Discussion Paper:

# Annual Wholesale Electricity Market Report to the Minister for Energy

5 June 2008

Economic Regulation Authority



WESTERN AUSTRALIA

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For further information, contact:

Economic Regulation Authority  
Perth, Western Australia  
Phone: (08) 9213 1900

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## Summary of Issues

### Discussion Point 1

The Authority invites comment on the impact of fuel supply and fuel prices on the market. In particular:

- to what extent, and in what way, do current issues in regard to fuel supply or fuel prices impact on long-term investment decisions in the market; and
- to what extent, and in what way, do current issues in regard to fuel supply or fuel prices impact on the day-to-day operation of the market, and outcomes in the market.

### Discussion Point 2

The Authority invites comment on the impact of fuel constraints on the market. In particular:

- to what extent, and in what way, do fuel constraints impact on the day-to-day operation of the market, and outcomes in the market;
- to what extent, and in what way, does the design of the market exacerbate problems caused by significant fuel constraints; and
- do current issues in regard to gas supply interruptions deter participation in the STEM.

### Discussion Point 3

The Authority invites comment on the application process for network access offers. In particular:

- at what stage during the process of planning a new facility do applicants approach Western Power, and to what extent do applicants make applications for network access in advance of the timing of the reserve capacity cycle due to the perception that the application process may take some time;
- to what extent has the timing of the application process affected participation in the reserve capacity mechanism for particular facilities;
- to what extent is the application process, including the timing of the application process, transparent; and
- if there is an issue with the application process, does the issue relate to the timing of the process, the transparency of the process, or both.

### Discussion Point 4

The Authority invites comment on whether the risk that a network connection will not be delivered on time impacts on investment incentives, including incentives to invest in new facilities on particular parts of the network.

### Discussion Point 5

The Authority invites comment on the determination of connection charges by Western Power, and the impact that these connection charges have on the effectiveness of the WEM. In particular:

- to what extent do connection charges influence long-term investment decisions;

- do connection charges provide appropriate locational investment signals; and
- is there sufficient transparency and predictability in the calculation of connection charges for participants to respond to the signals in making investment decisions.

#### **Discussion Point 6**

The Authority invites comment on whether network planning processes are sufficiently responsive to developments in the WEM and whether network planning decisions are sufficiently transparent to participants.

#### **Discussion Point 7**

The Authority invites comment on the extent to which the reserve capacity mechanism, along with other elements of the WEM, provides appropriate incentives for investment in a mix of new generation plant. The Authority is interested in specific factors that might have deterred potential new investment in the market.

#### **Discussion Point 8**

The Authority invites comment on the appropriateness of the mechanism for determining the reserve capacity price. In particular:

- does the reserve capacity price provide appropriate investment signals;
- would investment signals be improved by a shift to a reserve capacity price that is determined using a mechanism more closely reflecting market outcomes;
- what, if any, barriers currently exist that would impede a shift to a reserve capacity price that is determined by the market.

#### **Discussion Point 9**

The Authority invites comment on the extent to which the methodology for calculating reserve capacity refund payments promotes the market objectives, particularly in regard to reliability of supply. In particular:

- to what extent do participants respond to signals provided by the structure of reserve capacity refund payments; and
- if reserve capacity refunds reflected their impact on the market, how would this be expected to affect compliance or incentives to participate in the reserve capacity mechanism.

#### **Discussion Point 10**

The Authority invites comment on the effect of moving the STEM closer to real-time or of introducing multiple gate closures. In particular:

- would this encourage greater participation in the STEM or improve outcomes in the STEM, including through improved price signals;
- would the benefits to participants outweigh the costs to participants; and
- what, if any, barriers are there to such a change and what do these barriers suggest for the timing of such a change.



**Discussion Point 11**

The Authority invites comment on the extent to which Verve Energy's exposure to forecasting errors in the balancing market impacts on the effectiveness of the market.

The Authority invites comment on barriers to the introduction of competitive balancing, and what these barriers suggest for the shift to more competitive balancing arrangements.

**Discussion Point 12**

The Authority invites comment on the delivery of ancillary services, particularly in regard to the competitive delivery of ancillary services.

**Discussion Point 13**

The Authority invites comment on the impact that wind energy will have on the effectiveness of the WEM. In particular:

- to what extent, if any, will additional wind energy impose costs on the market, and will these costs be borne by the wind energy facilities or by other participants; and
- do the existing arrangements for network connection charges provide signals to wind energy facilities that reflect the impact of these facilities on the market.

**Discussion Point 14**

The Authority invites comment on the incentives for DSM to participate in the market. In particular:

- what, if any, barriers exist that would prevent the participation of DSM that could otherwise provide capacity at a price competitive with new generation; and
- would an alternative structure for payments for DSM, or an alternative treatment of DSM within the market, encourage the participation of DSM in a way that promotes the market objectives.

**Discussion Point 15**

The Authority invites comment on the rule change process and procedures, the consultation process for rule change proposals and the time taken to have a rule change proposal considered and finalised.

**Discussion Point 16**

The Authority invites comment on whether System Management remaining within Western Power impacts on the effectiveness of the market and, if so, in what way.

**Discussion Point 17**

The Authority invites comments on measures to improve price transparency in the market.

**Discussion Point 18**

The Authority invites comments on what, if any, impact retail market arrangements have on the WEM, and what implications this has for the effectiveness of the WEM.

**Discussion Point 19**

The Authority invites comment on the effect that the Ministerial Directions to Verve Energy and Synergy and the Vesting Contract have on outcomes in the market.

**Discussion Point 20**

The Authority invites comment on the processes for planning the development of the market over the longer term. In particular:

- to what extent do existing arrangements provide scope for, and transparency in regard to, the development of the market; and
- what aspects, if any, of the development of the market should be addressed in a more systematic manner, and in what forum.

# 1 Introduction

The purpose of this **Discussion Paper** is to assist interested parties making submissions to raise and comment on issues regarding the effectiveness of the Wholesale Electricity Market (**WEM**) in meeting the Wholesale Market Objectives. Submissions from interested parties will enable the Economic Regulation Authority (**Authority**) to prepare a report to the State Minister for Energy (**Minister**) pursuant to clause 2.16.11 of the Wholesale Electricity Market Rules (**Market Rules**). The Authority will produce the Annual Wholesale Electricity Market Report to the Minister (**Minister's Report**) after considering submissions received during this public consultation process and analysis of other data available to the Authority.

## 1.1 How to Make a Submission

A notice has been posted on the Authority's web site advising the release of this Discussion Paper. This notice invites submissions to be lodged with the Authority by 4:00pm (Western Standard Time) on 4 July 2008. Submissions should be in written and electronic form (where possible) and addressed to:

Discussion Paper: Annual WEM Report to the Minister  
Economic Regulation Authority  
PO Box 8469  
Perth Business Centre  
PERTH WA 6849

E-Mail: [SubmissionMinReport@era.wa.gov.au](mailto:SubmissionMinReport@era.wa.gov.au)  
Fax: (08) 9213 1999

In general, submissions from interested parties will be treated as in the public domain and placed on the Authority's web site. Where an interested party wishes to make a confidential submission, it should clearly indicate the parts of the submission that are confidential.

The receipt and publication of a submission shall not be taken as indicating that the Authority has knowledge either actual or constructive of the contents of a particular submission and, in particular, whether the submission in whole or in part contains information of a confidential nature and no duty of confidence will arise for the Authority in these circumstances.

Further information regarding this Discussion Paper can be obtained from:

John Lillywhite  
Wholesale Electricity Market  
Economic Regulation Authority  
Tel: (08) 9213 1952  
Fax: (08) 9213 1999  
E-Mail: [John.Lillywhite@era.wa.gov.au](mailto:John.Lillywhite@era.wa.gov.au)

Media enquiries should be directed to:

Paul Byrne  
Byrne & Byrne Corporate Communications  
Economic Regulation Authority  
Tel: (08) 9336 2081  
Mob: 0417 922 452

## 2 Background

The Market Rules require the Authority to provide the Minister with a report on the effectiveness of the WEM in meeting the Wholesale Market Objectives. The Wholesale Market Objectives are:

- to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
- to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- to encourage the taking of measures to manage the amount of electricity used and when it is used.

The Market Rules require the Authority to provide to the Minister a report on the effectiveness of the WEM at least annually, and more frequently where the Authority considers that the WEM is not effectively meeting the Wholesale Market Objectives. The Minister's Report is to include any recommended measures to increase the effectiveness of the WEM in meeting the Wholesale Market Objectives.

### 2.1 Reporting Requirements

Clause 2.16.12 of the Market Rules specifically requires the Minister's Report to include the following information:

- a summary of the information and data compiled by the Independent Market Operator (**IMO**) and the Economic Regulation Authority under clause 2.16.1;
- the Economic Regulation Authority's assessment of the effectiveness of the market, including the effectiveness of the IMO and System Management in carrying out their functions, with discussion of each of:
  - the Reserve Capacity market;
  - the market for bilateral contracts for capacity and energy;
  - the short term energy market (**STEM**);
  - Balancing;
  - the dispatch process;
  - planning processes; and
  - the administration of the market, including the Market Rule change process;
- an assessment of any specific events, behaviour or matters that impacted on the effectiveness of the market; and

- any recommended measures to increase the effectiveness of the market in meeting the Wholesale Market Objectives to be considered by the Minister.

## 2.2 Previous Minister's Report

This Discussion Paper is part of the process for the preparation of the second Minister's Report by the Authority. The Authority provided the first Minister's Report to the Minister on 21 December 2007, and released a public version of that first Minister's Report on 19 March 2008.

The Authority conducted its review for the first Minister's Report at a fairly high level. The Authority considered that this approach was appropriate for the first Minister's Report due to the extensive consultation that was undertaken during the restructuring of the electricity industry in Western Australia, the short time during which the WEM had been operating, and the expectation that the WEM will develop as it matures and as Market Participants develop a greater understanding of the market.

In the first Minister's Report, the Authority noted that an assessment of market data and analysis provided to the Authority by the IMO indicated that the market had been operating effectively during its early stages. In particular, the Authority noted that:

- since market commencement, new participants have entered the market, which will bring about a fall in the share of capacity in the market that is provided by Verve Energy from around 90 per cent to around 60 per cent over the years to 2009/10;
- despite Verve Energy accounting for the overwhelming majority of capacity in the market, other Market Participants have been active in the STEM since market commencement;
- with the entry of new generation facilities operated by Market Participants other than Verve Energy over the next few years, there will be a broader range of Market Participants scheduling bilateral quantities and participating in the STEM;
- outcomes in the market to date indicate that prices have tended to decline and become less volatile in both the STEM and the balancing market; and
- outcomes in the market to date indicate that prices in the STEM and the balancing market have provided useful signals to Market Participants, with prices responding to scarcity in the market.

In the first Minister's Report, the Authority also noted that it was not aware of outcomes in the STEM that indicate abuse of market power as an issue, but that it would continue to monitor bidding behaviour by Market Participants. The Authority also noted several other issues that it considered were deserving of particular ongoing review and scrutiny:

- the appropriateness of the investment signals provided by the market, particularly whether the market will lead to investment in excess capacity, or will lead to insufficient investment in base load or mid-merit capacity;
- the appropriateness of the timing of the reserve capacity mechanism, and whether this can create barriers to investment for facilities with long lead times;
- whether the timing of planned network outages impacts on the effectiveness of the market, particularly during peak periods; and
- whether there are barriers to the participation of consumers in demand-side management programs.

## 2.3 Approach

For this second Minister's Report, the Authority considers that a more focused consideration of fundamental issues affecting the effectiveness of the WEM in achieving the Wholesale Market Objectives is appropriate. The WEM has now been operating for a year and a half, so that the Authority is able to draw on evidence of outcomes in the market for a longer period than when the first Minister's Report was prepared, and stakeholders have greater experience operating within the market and understanding its strengths and weaknesses. As a result, the Authority considers that there is likely to be stronger evidence of any issues that have a material impact on the effectiveness of the market.

The Authority remains mindful of the fact that the reform of the Western Australian electricity market and the introduction of the WEM was designed in such a way as to progress towards more competitive outcomes, and that mechanisms are in place to facilitate a smooth transition towards more competitive outcomes. It may be that factors that have a material impact on the effectiveness of the market are an inevitable result of this transition process. Nevertheless, the Authority considers that it is appropriate to address these factors in this Minister's Report and to consider the longer-term development of the market.

The Authority recognises that issues outside the WEM itself – such as fuel supply, network access, retail tariffs and the timetable for further retail contestability – can have a material impact on the effectiveness of the WEM. The Authority considers that such issues raise two related questions. First, how do these issues impact on the achievement of the Wholesale Market Objectives? Second, are there elements of the design of the WEM that exacerbate the impacts of these issues? The Authority proposes to investigate both of these questions, but is mindful that not all factors that impact on the achievement of the Wholesale Market Objectives can be resolved within the WEM.

## 2.4 Process

### 2.4.1 Consultation

As part of the public consultation process for the Minister's Report, the Secretariat of the Authority has invited all key stakeholders to meet confidentially to discuss the effectiveness of the WEM. A number of stakeholders took the opportunity to meet with the Secretariat, and have provided some initial comments. The purpose of this initial consultation was to provide stakeholders an opportunity to inform the Authority of specific issues of which they are aware.

This initial feedback has provided the Authority with an appreciation of the concerns of a range of stakeholders. The issues raised by stakeholders, as well as the Authority's initial views, form the basis for this Discussion Paper.

### 2.4.2 Minister's Report

Following consideration of the matters raised during consultation, the submissions in response to this Discussion Paper, and the analysis of the Market Surveillance Data Catalogue (**MSDC**) and other available data, the Authority will prepare the Minister's Report. The Minister's Report is expected to be completed and submitted to the Minister by the end of September 2008. Pursuant to clause 2.16.15 of the Market Rules, the Authority must, after consultation with the Minister, publish a version of the Minister's

Report that has confidential and sensitive data aggregated or removed. This public version of the Minister's Report will be published on the Authority's web site following consultation with the Minister as provided for by clause 2.16.15 of the Market Rules.



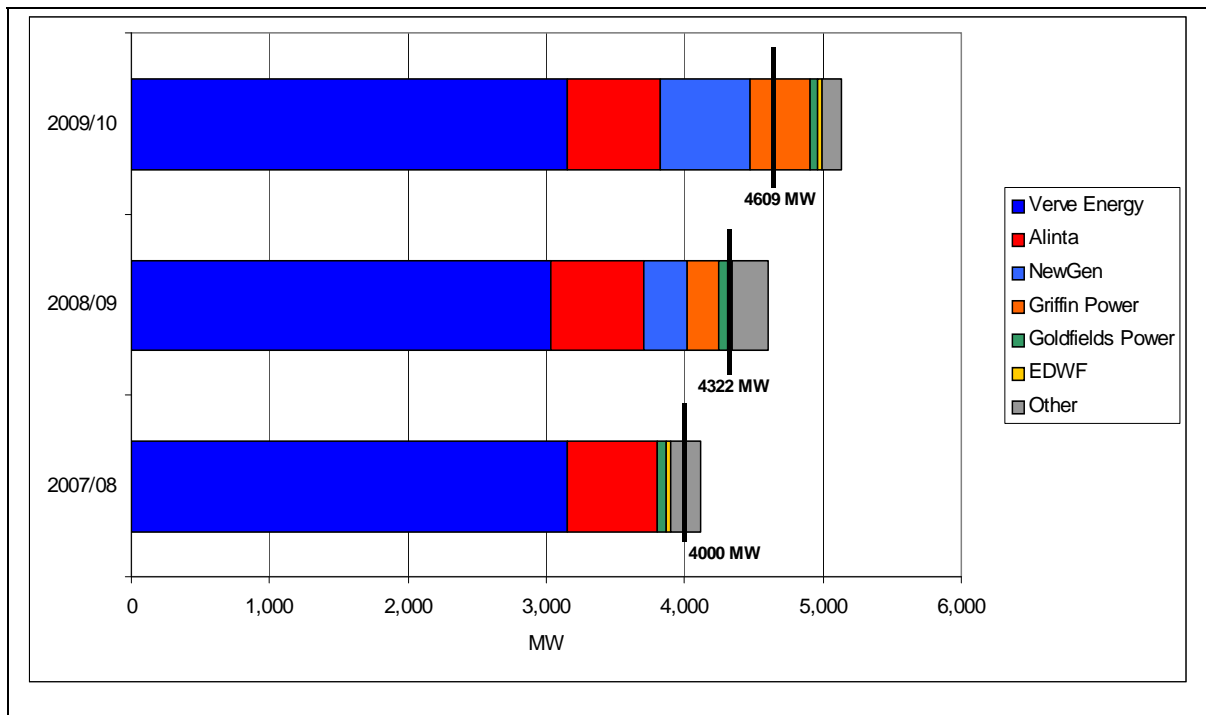
### 3 Overview of the WEM

This Section provides a brief overview of outcomes in the WEM from market commencement to the end of April 2008. Outcomes in both the capacity market and the energy market are reviewed.

#### 3.1 The Capacity Market

The Reserve Capacity Mechanism has so far successfully secured sufficient capacity for each capacity year. Figure 1 provides a summary of the capacity credits assigned to participants for each of the reserve capacity cycles completed so far, as well as the reserve capacity requirement for each year. For each capacity year, the number of capacity credits assigned to participants has exceeded the reserve capacity requirement.

**Figure 1: Capacity credits assigned**



The IMO's 2007 Statement of Opportunities Report (**SOO**) did note that there was a very small deficit of 25 MW for the 2007/08 capacity year. This deficit was the result of revised forecasts in the 2007 SOO, which led to higher forecasts of maximum demand in 2007/08. The IMO subsequently negotiated directly with potential suppliers of supplementary capacity to be available during the period from 29 January 2008 to 20 March 2008.

The reserve capacity cycle for 2010/11 is currently underway. The IMO has recently released its summary of the results of the request for Expressions of Interest to provide new generation and demand side management capacity.<sup>1</sup> The IMO estimates that 4,920

<sup>1</sup> The IMO's summary of the results of the request for Expressions of Interest is available from the IMO's web site: [http://www.imowa.com.au/rc\\_eoi.htm](http://www.imowa.com.au/rc_eoi.htm)

MW of existing capacity will be eligible to provide reserve capacity in 2010/11, compared to the preliminary estimate of the reserve capacity requirement in 2010/11 of 4,737 MW (final figures will not be available until the publication of the 2008 Statement of Opportunities Report, scheduled for July 2008). The IMO also notes that 18 Expressions of Interest were received for 2010/11, totalling 1,036.40 MW of additional capacity.

As yet, the IMO has not been required to run a reserve capacity auction to secure capacity.

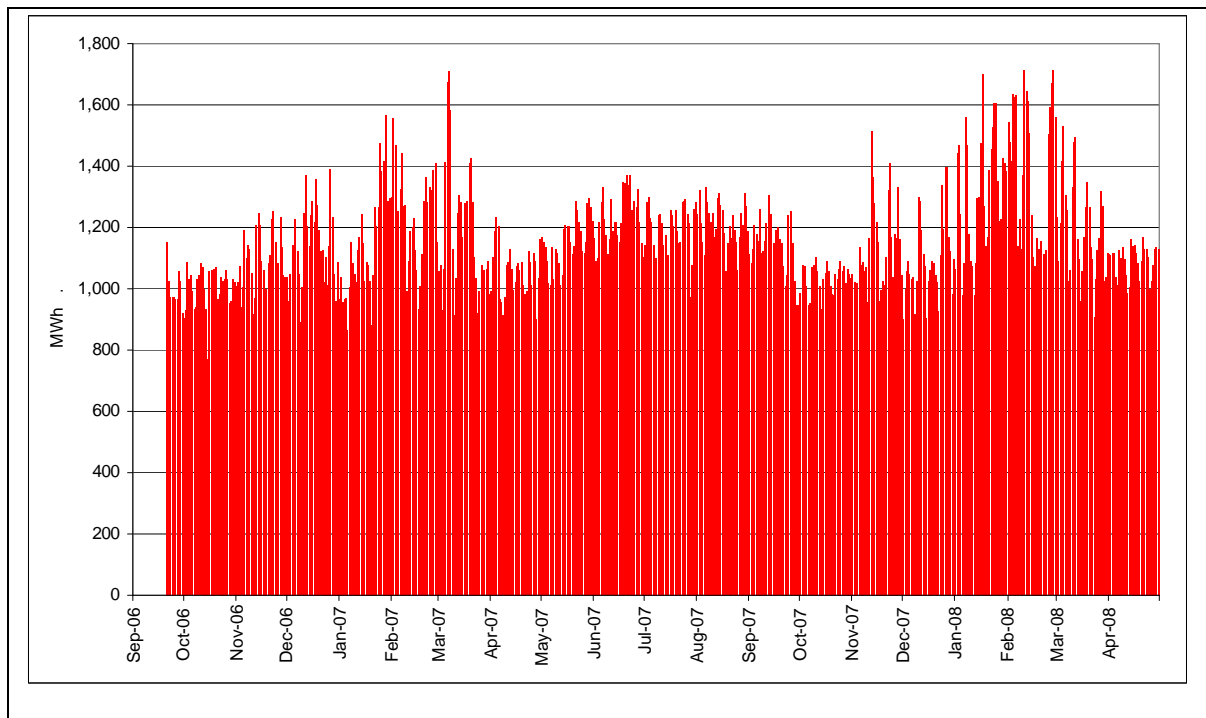
The reserve capacity prices over the period to the 2010/11 capacity year are set out in Table 1. While the maximum reserve capacity price for the 2010/11 capacity year has been determined by the IMO and approved by the Authority, the reserve capacity price effective in the market for 2010/11 will not be known until capacity credits are assigned.

**Table 1: Reserve capacity prices**

Period	Reserve Capacity Price (per MW per year)	Maximum Reserve Capacity Price (per MW per year)
21/09/06 to 01/10/06	\$127,500.00	\$150,000
01/10/06 to 01/10/07	\$127,500.00	\$150,000
01/10/07 to 01/10/08	\$127,500.00	\$150,000
01/10/08 to 01/10/09	\$97,834.92	\$122,500
01/10/09 to 01/10/10	\$108,458.57	\$142,200
01/10/10 to 01/10/11	–	\$173,400

## 3.2 The Energy Market

Figure 2 illustrates daily maximum SWIS demand (measured in MWh per trading interval) for each day from market commencement to 30 April 2008. As expected, peak demand days have occurred during the hot season, during January, February and March. There is also a visible increase in daily maximum demand over the winter period in 2007, but demand during this period did not reach the same peak levels that it reached during the hot season.

**Figure 2: Daily SWIS Maximum Demand**

### 3.2.1 The STEM

Figure 3 and Figure 4 illustrate the simple average daily peak and off-peak STEM prices for each day from market commencement to 30 April 2008, as well as 30-day and 90-day moving averages of these prices.

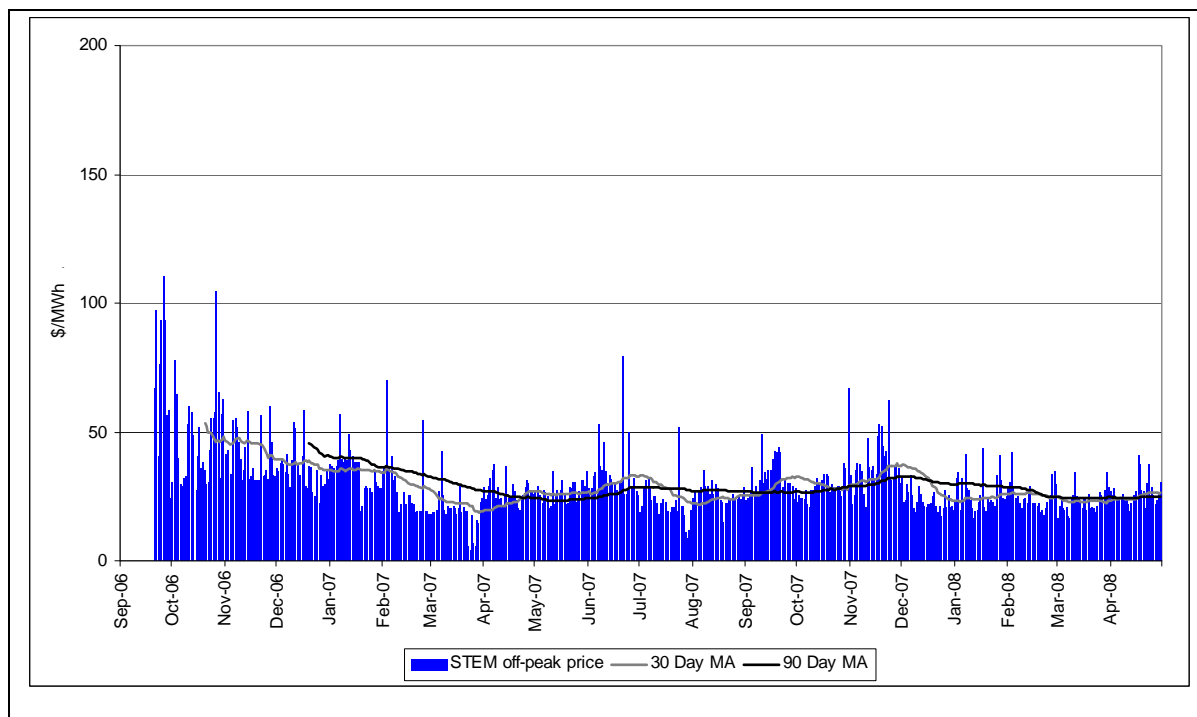
As noted in the previous Minister's Report, both peak and off-peak STEM prices were relatively high and variable during the first months following market commencement.

This pattern can be observed for daily average off-peak STEM prices, as seen in Figure 3. In the first few months following market commencement, daily average off-peak STEM prices were regularly greater than \$50/MWh. Since then, off-peak STEM prices have been both lower and less variable. This is reflected in the moving averages for daily average off-peak STEM prices. Both 30-day and 90-day moving averages were close to, or above, \$50/MWh during the first few months of the market, but both have since fallen and have consistently been between \$20/MWh and \$30/MWh.

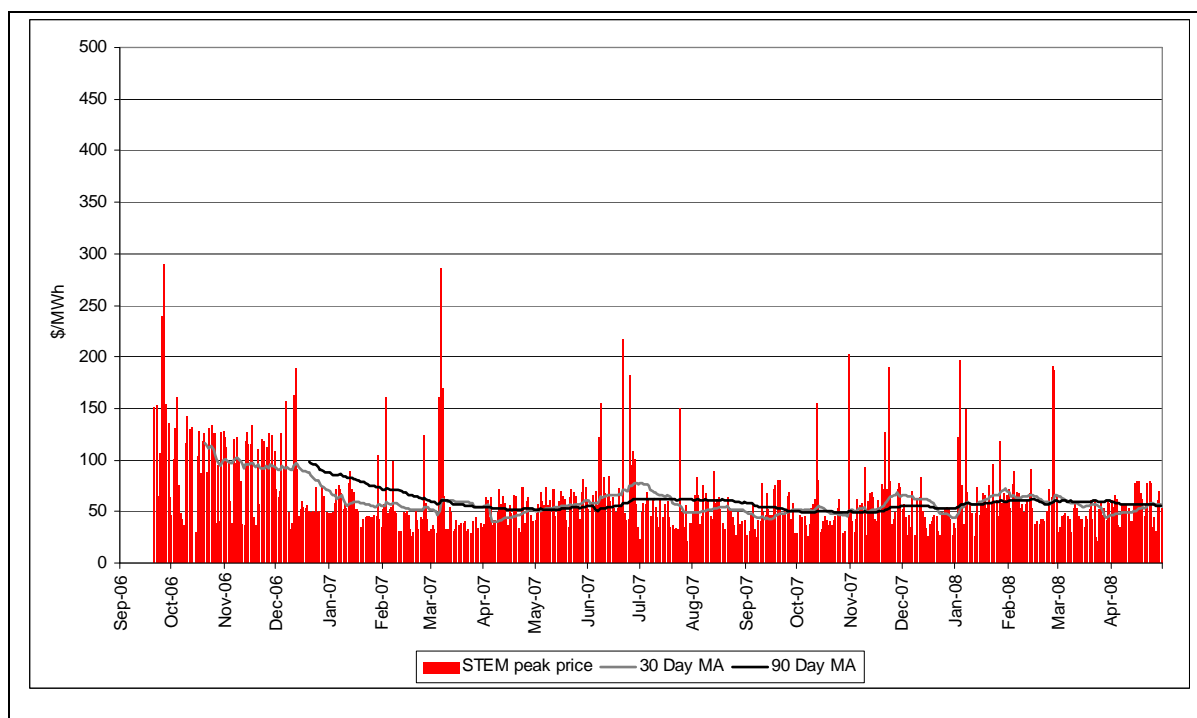
A similar pattern can be observed for daily average peak STEM prices, as seen in Figure 4. In the first few months following market commencement, daily average peak STEM prices were regularly greater than \$100/MWh. Since then, peak STEM prices have been both lower and less variable, as reflected in the moving averages for peak STEM prices. Both 30-day and 90-day moving averages were close to, or above, \$100/MWh during the first few months of the market, but both have since fallen and have consistently been around \$50/MWh.

There are slight seasonal variations that can be observed in peak and off-peak STEM prices. This can be seen most clearly in the 30-day moving averages for peak and off-peak prices. These increased to some extent during winter, and again during summer.

**Figure 3: Average daily off-peak STEM prices<sup>2</sup>**



**Figure 4: Average daily peak STEM prices**

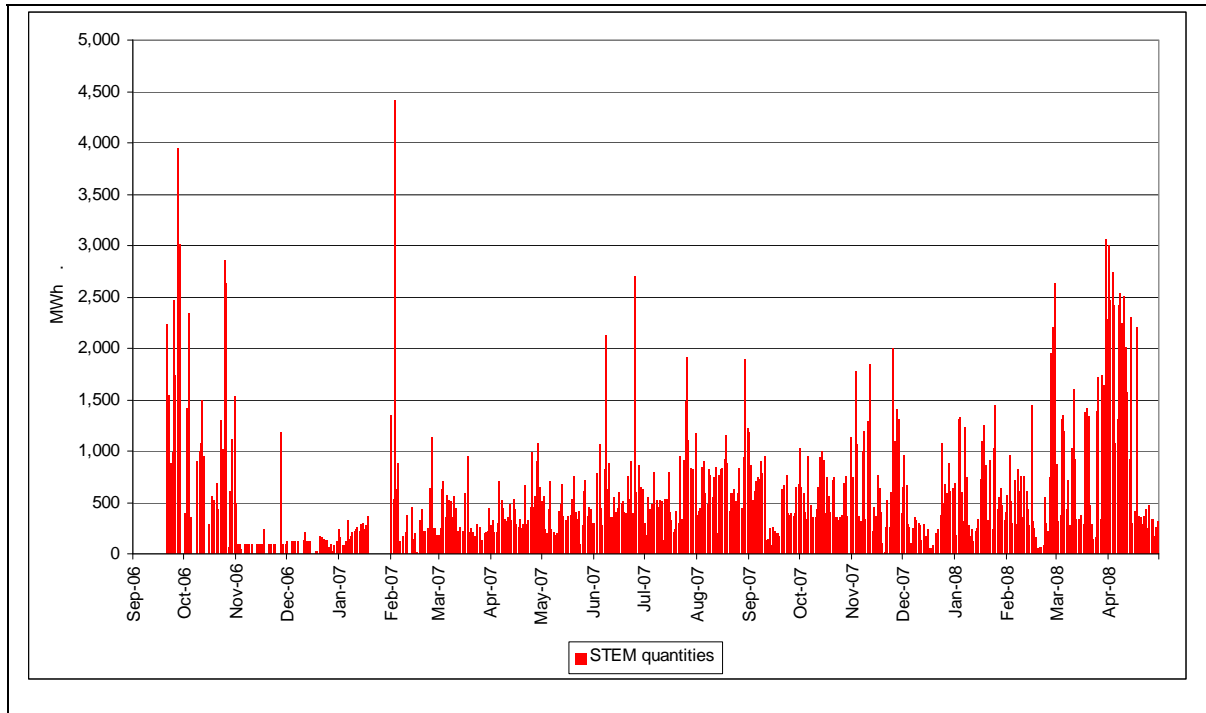


Total volumes of energy traded in the STEM for each day from market commencement to 30 April 2008 are illustrated in Figure 5. As with STEM prices, STEM volumes were quite variable during the first few months following market commencement, and were very low over the 2006/07 summer. Since then, trading volumes have been more consistent, with

<sup>2</sup> The average prices illustrated in Figure 3 and Figure 4 are simple averages, not volume weighted averages.

some evidence of a trend towards increased volumes in the STEM. Certainly, trading volumes in April 2008 have been significantly higher than in previous months, although it is too early at this stage to tell whether this is a consistent pattern.

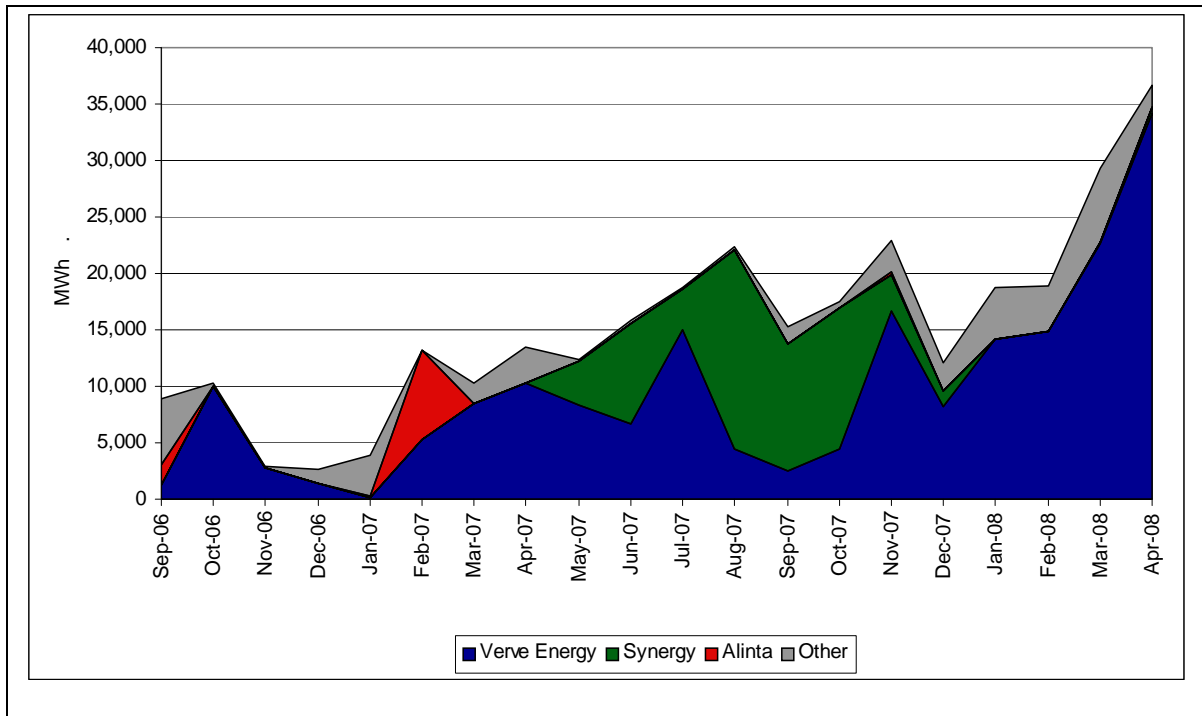
**Figure 5: Summed STEM traded quantities (MWh per day)**



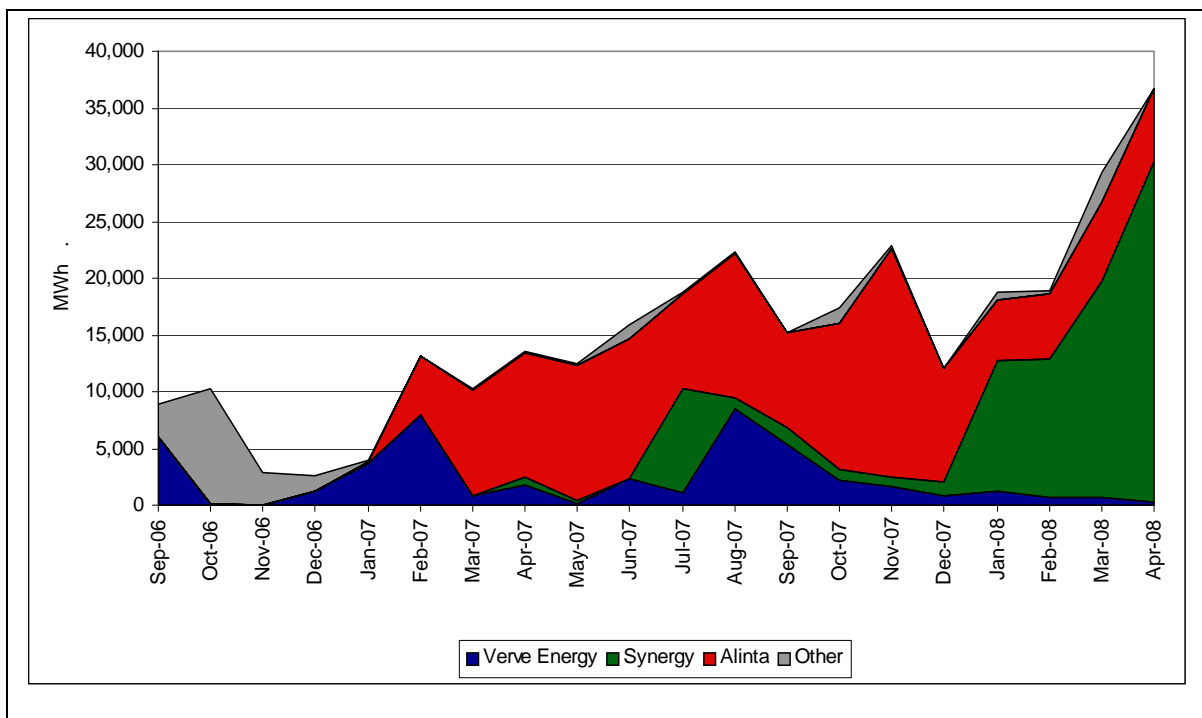
Quantities traded in the STEM are principally accounted for by Verve Energy, Synergy and Alinta. Figure 6 illustrates total quantities bought in the STEM each month by market participants, showing that Verve Energy and Synergy have accounted for the majority of volumes bought in the STEM. Figure 7 illustrates total quantities sold in the STEM each month by market participants, showing that Synergy and Alinta have accounted for the majority of volumes sold in the STEM.<sup>3</sup>

<sup>3</sup> During the first few months following market commencement, the IMO observed that some participants made bids and offers at the same price. If the market cleared at this price, these quantities, which are effectively traded internally, were nevertheless recorded as quantities. However, these quantities have been excluded from Figure 6 and Figure 7.

**Figure 6: Quantities bought in the STEM (MWh per month)**



**Figure 7: Quantities sold in the STEM (MWh per month)**



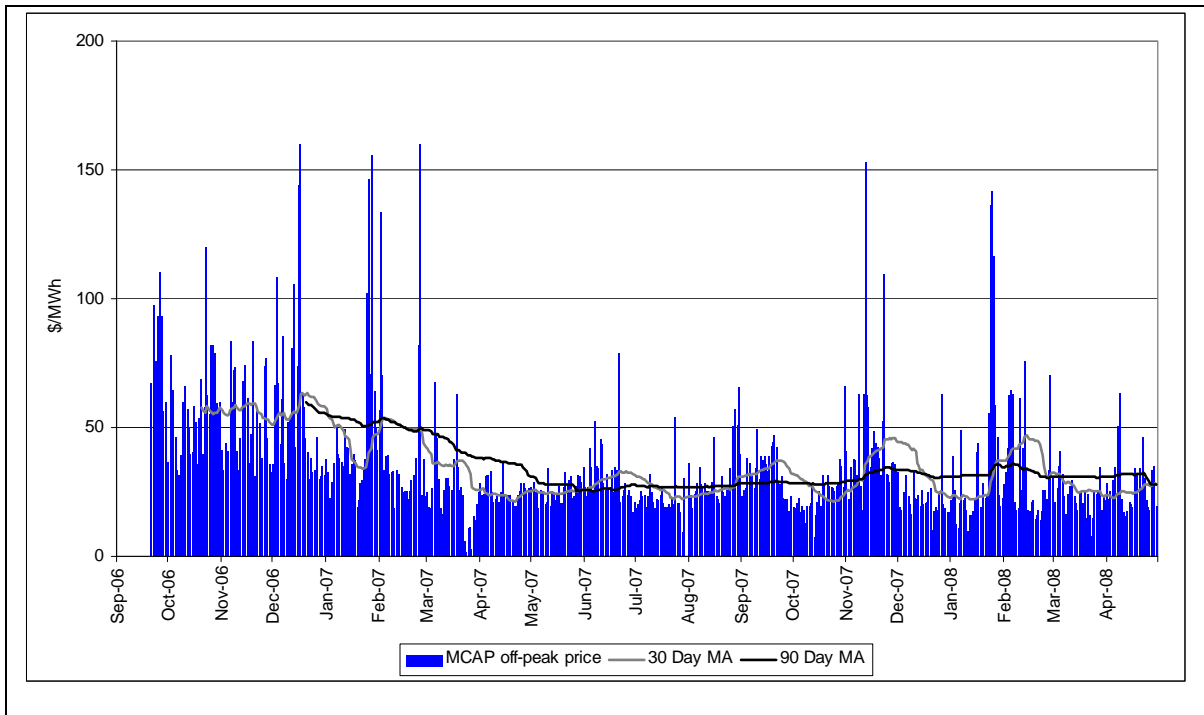
### 3.2.2 Balancing

Figure 8 and Figure 9 illustrate the simple average daily peak and off-peak marginal cost administered price (**MCAP**) for each day from market commencement to 30 April, as well as 30-day and 90-day moving averages of these prices.

MCAPs have followed a broadly similar pattern to STEM prices. That is, both peak and off-peak daily average MCAPs were high and variable in the first few months following market commencement, before becoming lower and less variable. This is reflected in moving average prices, with off-peak MCAPs falling from around \$50/MWh to between \$20/MWh and \$30/MWh, and peak MCAPs falling from around \$200/MWh to around \$100/MWh.

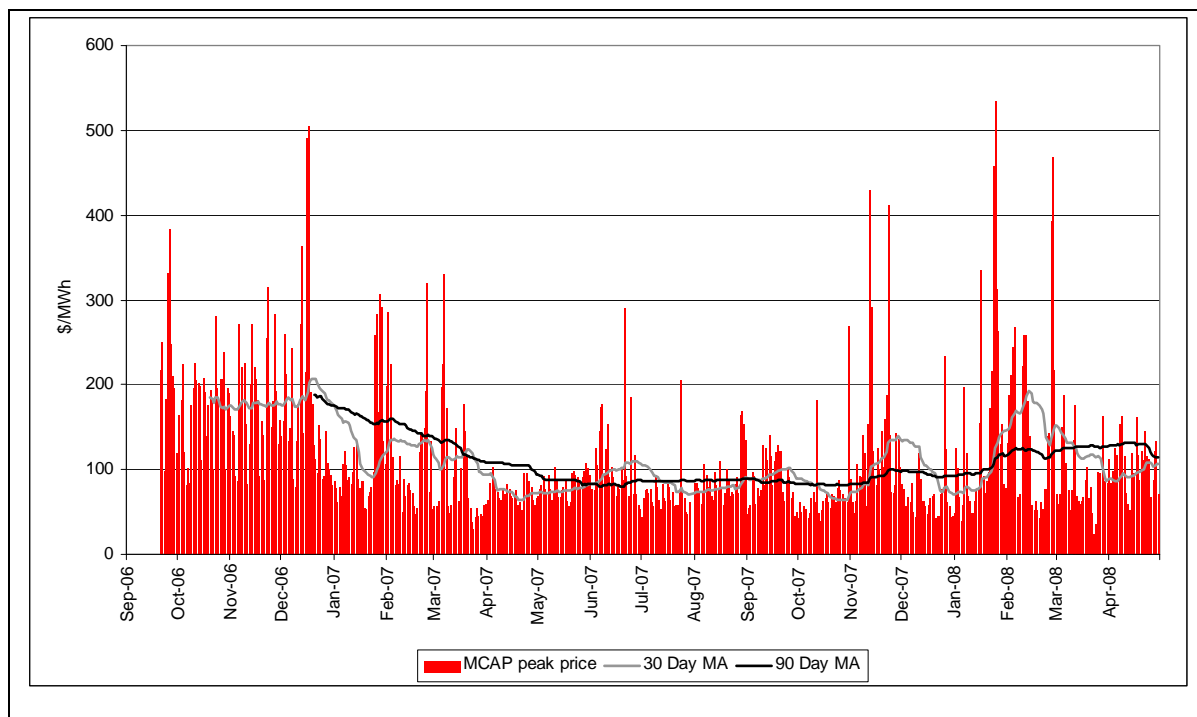
Comparing MCAPs to STEM prices, it is clear that MCAPs are more variable than STEM prices. Both peak and off-peak MCAPs spike more frequently than STEM prices. This is reflected in greater variability for 30-day moving averages for MCAPs, relative to STEM prices. This pattern was particularly noticeable during January, February and March 2008, with MCAPs consistently reaching higher levels than STEM prices.

**Figure 8: Average daily off-peak MCAPs<sup>4</sup>**



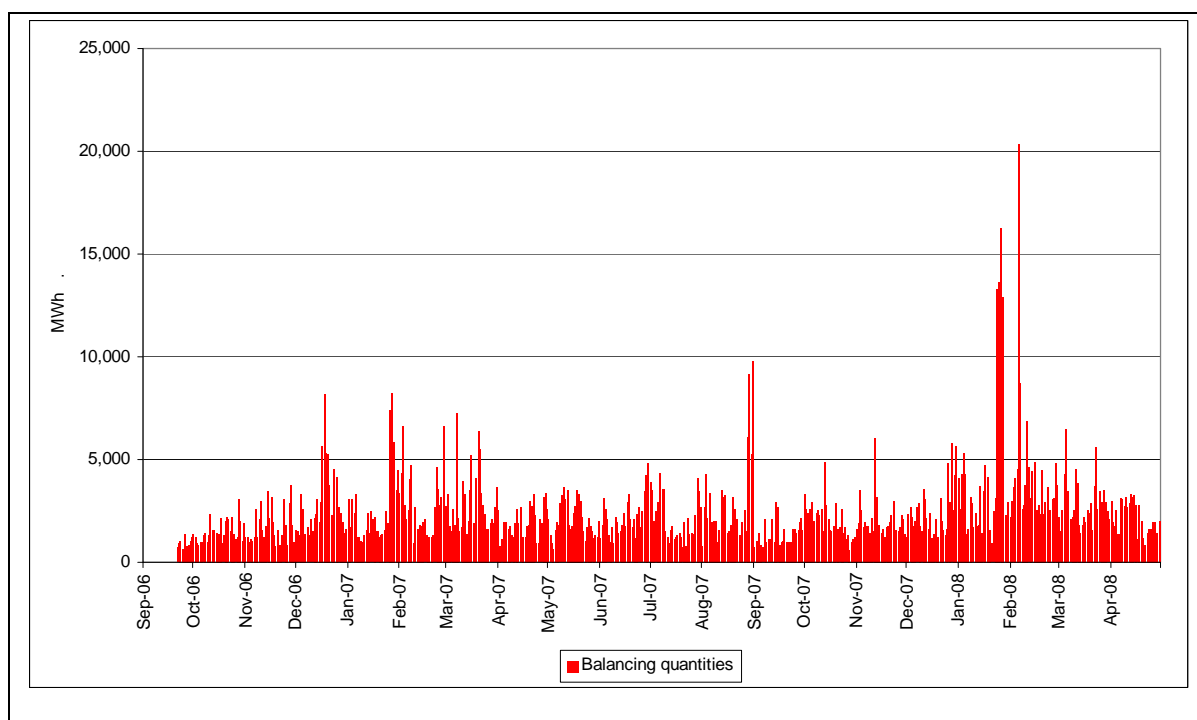
<sup>4</sup> The average prices illustrated in Figure 8 and Figure 9 are simple averages, not volume weighted averages.

**Figure 9: Average daily peak MCAPs**



Total volumes of energy in the balancing market for each day from market commencement to 30 April 2008 are illustrated in Figure 10. Comparing Figure 5 to Figure 10, it is clear that balancing volumes are generally greater than STEM volumes. This was evident from the data that was available for the previous Minister’s Report, and has become more apparent since. Particularly during January, February and March 2008, balancing volumes have increased, with several significant spikes.

**Figure 10: Summed balancing quantities (MWh per day)**



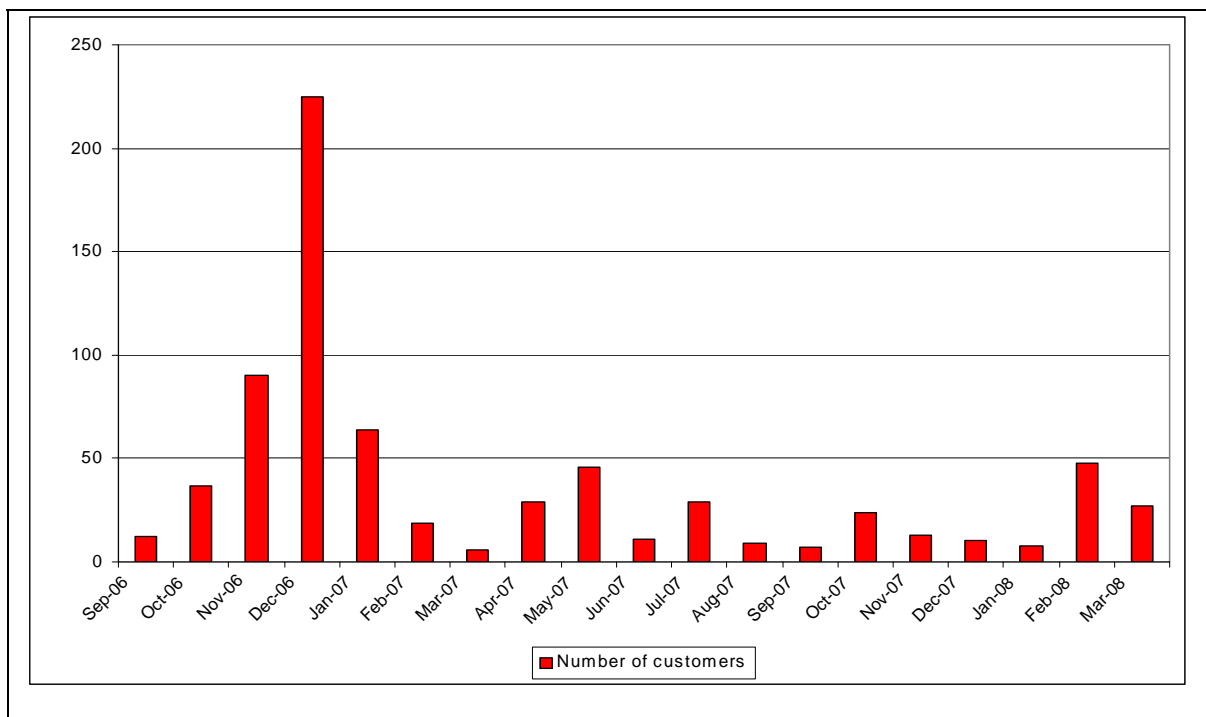


### 3.3 Retail market

The electricity market in Western Australia has been progressively opened to retail competition since 1997. Since January 2005, all customers with annual consumption in excess of 50 MWh have been contestable.

Figure 11 illustrates the rate at which customers have churned between retailers since market commencement. As can be seen in Figure 11, levels of customer churn spiked in the first months following market commencement, with over 200 customers churning in December 2006. Since then, churn rates have moderated, with an average of around 25 customers churning each month.

**Figure 11: Customer churn**



## 4 Discussion of Issues

This Section provides an overview of issues raised by stakeholders during public consultation that was recently undertaken on a confidential basis, and requests further comment on these issues. As well as responding to specific requests for comment, stakeholders are also invited to respond to any other issues relevant to the Authority's review of the effectiveness of the market.

### 4.1 Fuel availability

Some stakeholders have raised concerns about the impact of fuel availability, prices and delivery constraints on the effectiveness of the WEM. Two sets of issues were raised by stakeholders: the impact of the tight market for the supply of gas on the long-term development of the market and the way that short-term gas availability interacts with the operation of the market.

#### 4.1.1 Gas supply

The first, and broader, set of issues is the impact that the tight market for the supply of gas, and the high prices of gas, will have on the development of the market. Effective electricity markets depend on a mix of different fuel types, and competition between these fuels. Gas is important because it is typically used to fuel mid-merit and peaking plants, and tends to be cheaper in this use than alternative fuels. Gas can also be used as an alternative to coal for base-load plants. If gas is unavailable, or gas prices are high, this will have implications for the market.

Regarding the price of gas, some stakeholders have commented that gas prices are currently very high by historical standards, and likely to remain so for several years to come. Some stakeholders have also noted that coal prices are shadowing gas prices, so that there have been significant increases in the cost to generators of the two fuels that are primarily used in the south west interconnected system (**SWIS**). It is not clear that this would imply a problem with the WEM: certainly if generators face higher fuel costs, it would be expected that this would be reflected in higher prices for energy. There does not appear to be any restriction on prices in the WEM that would prevent this occurring, with the energy price limits for the market reflecting fuel prices.

Regarding the supply of gas, some stakeholders have raised concerns that it is currently very difficult to contract for new long-term supplies of gas in the SWIS, and that this is also likely to remain the case for several years to come. If so, then it would be expected to have an impact on the ability of new gas fired plant to enter the market, and may have implications for the ongoing operation of existing gas plant. In one sense, this does not imply a problem with the WEM: it is appropriate for decisions on investment in new plant to respond to fuel availability. To the extent that the current fuel availability issues are not long-lasting, it might be considered that the present difficulty of securing gas supplies will lead to plant technology investment decisions that are sub-optimal in the long run. Presumably, however, investors are in the best position to know what type of plant makes sense given the outlook for fuel supplies.

In the short term, the market might experience capacity shortages if there is insufficient capacity made available through the reserve capacity mechanism as a result of the difficulties in securing supplies of gas. Certainly there is no evidence of this being an issue at present.

## Discussion Point 1

The Authority invites comment on the impact of fuel supply and fuel prices on the market. In particular:

- to what extent, and in what way, do current issues in regard to fuel supply or fuel prices impact on long-term investment decisions in the market; and
- to what extent, and in what way, do current issues in regard to fuel supply or fuel prices impact on the day-to-day operation of the market, and outcomes in the market.

### 4.1.2 Gas availability

The second set of issues regarding fuel availability raised by stakeholders relate to short-term gas supply interruptions.

Some stakeholders commented on the relationship between the timing of the STEM and the timing of pipeline operational obligations. This issue was also raised during the course of public consultation for the previous Minister's Report. The STEM is a day ahead market, with bids and offers to be made the morning before a trading day. However, some stakeholders have commented that they are not aware of the availability of spot gas and transport on the Dampier to Bunbury Natural Gas Pipeline until later in the day. The result is that participants are required to submit STEM bids and offers for a trading day without knowing the availability of spot gas and transport for the trading day. Where a participant expects to have gas available when making its STEM submission, but discovers that gas will not be available, the participant may be required to operate on liquid fuel, having submitted STEM bids and offers on the assumption that it would operate on gas. This situation can have implications for the financial positions of market participants. The timing of the STEM is discussed further in Section 4.4.

Some stakeholders commented that gas supply interruptions can also impact more broadly on the market. In particular, some stakeholders commented that during significant gas supply interruptions – such as the event at the beginning of 2008<sup>5</sup> – there may be circumstances in which participants are acting in good faith to ensure the market continues to operate effectively, yet the Market Rules would expose these participants to financial risk or penalties. It was suggested that it may be appropriate for the Market Rules to include provision for an operating state to govern such circumstances. The purpose of such an operating state would be to ensure that, during gas supply interruptions, participants will act in a way that promotes the wholesale market objectives.

The Authority notes that the Market Rules define three operating states: a normal operating state, a high risk operating state and an emergency operating state. During the gas supply interruption at the beginning of 2008, the market was in an emergency operating state, so that no penalties would have applied for out of merit operation instructed by System Management.

<sup>5</sup> On 2 January 2008, an electrical fault at the North West Shelf Joint Venture's Karratha Gas Plant resulted in a production shutdown and the interruption of gas supplies to the domestic market. Production resumed on 4 January.

## Discussion Point 2

The Authority invites comment on the impact of fuel constraints on the market. In particular:

- to what extent, and in what way, do fuel constraints impact on the day-to-day operation of the market, and outcomes in the market;
- to what extent, and in what way, does the design of the market exacerbate problems caused by significant fuel constraints; and
- do current issues in regard to gas supply interruptions deter participation in the STEM.

## 4.2 Network issues

Some stakeholders have raised concerns with access to the transmission network, particularly in regard to receiving a network access offer, connection charges and network planning.

### 4.2.1 *Application process for network access offers*

The Market Rules require that an application for certification of reserve capacity for a facility that has not yet entered service include an access offer from Western Power that indicates that the facility is entitled to network access.

Some stakeholders have raised concerns about the time taken to receive a network access offer from Western Power, and have suggested that delays in receiving a network access offer can delay participation in the reserve capacity mechanism. This might impact on the competitiveness of, and outcomes in, the capacity market.

Western Power has commented that the process for providing a network access offer is necessarily a lengthy process. In order to determine the impact of a new connection on the network, Western Power needs to undertake both static network modelling and dynamic network modelling. These steps need to be undertaken sequentially, and Western Power has commented that each set of studies can take two to four months. Following network studies, Western Power needs to undertake an assessment of the cost of the work required to provide a network connection. Western Power has commented that this can take a further two to four months. Depending on the magnitude of work required to provide a network connection, Western Power may then need to proceed through the regulatory test process, and possibly receive approval for network investment from Western Power's board and the Minister. The result is that, from the time that Western Power begins its assessment of an application, it can take up to 18 months to provide a network access offer.

Stakeholders have also suggested that some applicants for network access have been informed that Western Power is not currently in a position to process their application for network access because of the number of other earlier applications that Western Power is already processing. Western Power has commented on the large number of applications for network access that it has recently received and that, given the number of applications, it has to adopt some system for determining the order in which it will process applications. Currently, Western Power adopts a queuing policy that assesses applications for network

access in the order that they are received. As a result of the large number of applications that Western Power is already processing, Western Power has informed a number of applicants that it cannot commence processing their applications at this stage, or cannot do so for 6 to 12 months.

### Discussion Point 3

The Authority invites comment on the application process for network access offers. In particular:

- at what stage during the process of planning a new facility do applicants approach Western Power, and to what extent do applicants make applications for network access in advance of the timing of the reserve capacity cycle due to the perception that the application process may take some time;
- to what extent has the timing of the application process affected participation in the reserve capacity mechanism for particular facilities;
- to what extent is the application process, including the timing of the application process, transparent; and
- if there is an issue with the application process, does the issue relate to the timing of the process, the transparency of the process, or both.

#### 4.2.2 *Commitment to delivery*

Some stakeholders have commented that, having received a network access offer from Western Power, the owner of a new facility nevertheless bears the risk that Western Power will fail to provide a network connection by the start of the relevant capacity year. The result could be that the owner of a new facility is required to make payments to the IMO out of its reserve capacity security or is required to make reserve capacity refund payments because the network connection is not delivered on time, even though the new facility is otherwise ready for operation at the start of the relevant capacity year.

The Authority understands that there has not yet been a situation in which the operation of a new facility has been delayed as a result of a delay in the delivery of a network connection. Nevertheless, if delivery risk is a genuine issue with implications for the effectiveness of the market, it may be appropriate to implement some mechanism to provide incentives to promote delivery of network connections on a timetable that is appropriate to the reserve capacity mechanism.

#### Discussion Point 4

**The Authority invites comment on whether the risk that a network connection will not be delivered on time impacts on investment incentives, including incentives to invest in new facilities on particular parts of the network.**

#### 4.2.3 *Deep connection charges*

Some stakeholders have commented on the determination of deep connection charges for network access applications.

Some stakeholders have commented that the determination of connection charges can very much depend on where an applicant for network access is in the queue for network access, and the timing of required network augmentation work. There are two issues with this process.

First, some stakeholders questioned whether it is appropriate for similar applications for network access to face very different connection charges based on the order and timing of their application. For instance, some stakeholders noted examples under which an initial applicant faced minimal deep connection charges whereas a subsequent applicant could face significant charges due to the need for network augmentation to accommodate that subsequent party. The reverse situation could also be imagined, with the first applicant facing significant deep connection charges while subsequent applicants do not. By reflecting the available capacity on the network at a certain point in time, deep connection charges do provide locational price signals that encourage applicants for network access to locate in areas where there is sufficient network capacity to meet their needs. However, stakeholders seemed concerned that such an approach could provide prospective applicants with incentives to either bring forward or delay applications purely to free-ride on other applicants' contributions or to avoid themselves becoming the object of free-riding by others.

This raises the second issue, which is the transparency of the process for determining the deep connection charges associated with any particular application for network access. Some stakeholders commented that they are unclear how deep connection charges are calculated, particularly in circumstances where there are several applications with Western Power for connection to the same part of the network. Where Western Power receives several applications for connection to the same part of the network, the results of the network modelling and the cost modelling undertaken by Western Power will depend on the potential projects that are included in Western Power's modelling. Some stakeholders commented that there was uncertainty about the principles that Western Power uses to determine the scenarios that it models.

One alternative raised by stakeholders is to develop a headworks charging regime to provide greater certainty to applicants regarding transmission entry charges. However, this approach would not reduce the time required to augment the network that is due to the need for system studies, regulatory testing, environmental approvals and so on.

**Discussion Point 5**

The Authority invites comment on the determination of connection charges by Western Power, and the impact that these connection charges have on the effectiveness of the WEM. In particular:

- to what extent do connection charges influence long-term investment decisions;
- do connection charges provide appropriate locational investment signals; and
- is there sufficient transparency and predictability in the calculation of connection charges for participants to respond to the signals in making investment decisions.

**4.2.4 Network planning**

Some stakeholders have expressed concerns about the responsiveness and the transparency of network planning processes.

The Authority notes that Western Power publishes a Transmission and Distribution Annual Planning Report, which outlines Western Power's network development plans.<sup>6</sup> These plans are prepared in response to forecast electricity demand growth from existing and prospective customers, and expected generation requirements.

Nevertheless, some stakeholders considered that a network planning process could determine future investments in the network in a more responsive and transparent manner, thereby assisting generators make decisions about potential sites for investment in new capacity.

**Discussion Point 6**

The Authority invites comment on whether network planning processes are sufficiently responsive to developments in the WEM and whether network planning decisions are sufficiently transparent to participants.

**4.3 The reserve capacity mechanism****4.3.1 Incentives to invest**

Some stakeholders have raised concerns about the incentives that the WEM provides to invest in new generation plant.

Incentives for investment were also raised as an issue during public consultation for the previous Minister's Report. In that Minister's Report, the Authority considered evidence of new investment and noted that a mix of new plant had entered the market since the

<sup>6</sup> The 2008 Annual Planning Report was recently released by Western Power and is available from Western Power's web site:  
[http://www.wpcorp.com.au/subContent/aboutUs/publications/Annual\\_planning\\_report\\_.html](http://www.wpcorp.com.au/subContent/aboutUs/publications/Annual_planning_report_.html)

commencement of the reserve capacity mechanism. However, the Authority noted that it was difficult to judge the appropriateness of the mix of new investment that had occurred, and inappropriate to assess investment outcomes in the short-term. The Authority noted in the previous Minister's Report that it would continue to investigate outcomes in the market to assess whether the market provides adequate incentives for investment in mid-merit and peaking plant.

The Authority notes that, since undertaking its previous Minister's Report, the reserve capacity cycle for 2010/11 has commenced. The IMO has recently released its summary of the results of the request for Expressions of Interest to provide new generation and demand side management capacity.<sup>7</sup> In this summary document, the IMO estimates that 4,920 MW of existing capacity will be eligible to provide reserve capacity in 2010/11, compared to the preliminary estimate of the reserve capacity requirement in 2010/11 of 4,737 MW (final figures will not be available until the publication of the 2008 Statement of Opportunities Report, scheduled for July). The IMO also notes that 18 Expressions of Interest were received for 2010/11, totalling 1,036.40 MW of additional capacity. Of this total capacity, 237 MW is from plant fired primarily by natural gas, 107.90 MW is from plant fired primarily by diesel, and 691.50 MW is from renewable plant.

Some stakeholders have again raised the issue of investment incentives provided by the WEM. In particular, stakeholders have suggested that, to date, investments in the SWIS have either been driven by the wholesale procurement process run by Synergy, have occurred as a result of participants investing in plant primarily to meet the energy needs of discrete mining or mineral processing facilities, or have occurred as a result of participants seeking to make use of their fuel assets. Stakeholders have suggested that uncertainty about access to fuel and access to the network in Western Australia, and broader uncertainties about carbon trading, are keeping other potential new entrants from participating in the market. The Authority notes that the market has been designed so that retailers and customers drive investment in new plant.

On the other hand, some stakeholders considered that incentives to invest within the reserve capacity mechanism could be excessive due to the methodology for setting the capacity price, as discussed in Section 4.3.3.

#### Discussion Point 7

**The Authority invites comment on the extent to which the reserve capacity mechanism, along with other elements of the WEM, provides appropriate incentives for investment in a mix of new generation plant. The Authority is interested in specific factors that might have deterred potential new investment in the market.**

### 4.3.2 *Timing of the reserve capacity mechanism*

Some stakeholders have commented that conditional certification for a new facility in advance of the timing of the reserve capacity cycle, as available under the Market Rules, does not provide sufficient certainty to finance new facilities. As a result, some stakeholders consider that financing facilities with long lead times under the current timeframes for the reserve capacity mechanism remains problematic.

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<sup>7</sup> The IMO's summary of the results of the request for Expressions of Interest is available from the IMO's web site: [http://www.imowa.com.au/rc\\_eoi.htm](http://www.imowa.com.au/rc_eoi.htm)



The IMO commented that it is aware of these issues, and consider that the Market Rules currently provide for certification of facilities in advance of the two-year timeframe for the reserve capacity mechanism. In other words, facilities are currently able to gain certification further in advance of a capacity year than two years, as long as they meet all the requirements for certification. The IMO considers that there may be benefit to clarifying the Market Rules in respect of the timing of certification, and is considering a rule change proposal to achieve that outcome.

### 4.3.3 Capacity price

Some stakeholders have commented on the appropriateness of the reserve capacity price, and the extent to which the reserve capacity price provides appropriate investment signals.

The extent to which the reserve capacity price sends signals that lead to investment in excess capacity in the SWIS was an issue raised during public consultation for the previous Minister's Report. In that Minister's Report, the Authority noted that outcomes at that stage indicated that capacity credits assigned had exceeded the reserve capacity requirement. However, the Authority noted that it is inappropriate to examine capacity in the WEM at a particular point in time, or even over the short term. The Authority noted that it would continue to investigate outcomes in the market to assess whether patterns of investment promote the Wholesale Market Objectives.

Some stakeholders have again raised this issue and, in particular, have noted that the reserve capacity price is not sufficiently influenced by the demand for and supply of capacity in the market. The Authority notes that, currently, if a reserve capacity auction is not run, the monthly reserve capacity price is simply 85 per cent of the maximum reserve capacity price. From 1 October 2008, however, if a reserve capacity auction is not run, the monthly reserve capacity price is pro-rata adjusted if there is excess capacity so that the total payments for reserve capacity are the same as they would have been without the excess capacity.

Nevertheless, some stakeholders commented that this adjustment will still fail to reflect the interaction between the balance of demand and supply for capacity and the price for capacity that would be observed in a market. That is, where a reserve capacity auction is not run, the capacity price would remain higher in the event of excess capacity than it would be if the capacity price were determined in a market.

This relates to the more general comment made by some stakeholders that, since a reserve capacity auction has not yet been required, the reserve capacity price is effectively an administered price. Some stakeholders have commented that they consider a move to a market determined price would send more efficient pricing signals, and that this is likely to be particularly important with the expanded Mandatory Renewable Energy Target (**MRET**) target and the potential for this to lead to an increase in wind power in the SWIS. Stakeholders recognised that now may not be the appropriate time to move to a market determined capacity price, but were interested in thinking about the process and timing for such a transition.

Some stakeholders also commented that determining the reserve capacity price on a pro-rated basis in the event that excess capacity is made available makes it difficult for investors to forecast the reserve capacity payment that they will receive. It was suggested that an alternative would be for the pro-rated reserve capacity price only to apply to newly commissioned generation capacity, with existing facilities receiving a reserve capacity price that is not adjusted in the event that excess capacity is made available.

### Discussion Point 8

The Authority invites comment on the appropriateness of the mechanism for determining the reserve capacity price. In particular:

- does the reserve capacity price provide appropriate investment signals;
- would investment signals be improved by a shift to a reserve capacity price that is determined using a mechanism more closely reflecting market outcomes;
- what, if any, barriers currently exist that would impede a shift to a reserve capacity price that is determined by the market.

#### 4.3.4 *Reserve capacity refund*

Some stakeholders raised concerns about the appropriateness of the methodology for calculating reserve capacity refund payments.

Refund payments to the market for failure to comply with reserve capacity obligations vary depending on the trading interval during which the failure to comply occurs. Refund payments are higher during February, March and April than during other months, higher during peak periods than off-peak periods, and higher during business day peak periods than non-business day peak periods. This system for calculating refund payments sends signals to avoid a failure to comply during periods when system demand is likely to be highest.

Some stakeholders commented, however, that periods during which system demand is likely to be highest are not necessarily periods during which a failure to comply with reserve capacity obligations is most likely to have an impact on the market. The reason is that periods during which system demand is likely to be highest are also those periods when most plant is available. In practice, therefore, some stakeholders consider that a failure to comply may be more likely to have an impact on the market during periods of lower demand when there are significant planned outages. This suggests that an alternative system for calculating refund payments could relate refund payments to whether there has been an impact on the market.

### Discussion Point 9

The Authority invites comment on the extent to which the methodology for calculating reserve capacity refund payments promotes the market objectives, particularly in regard to reliability of supply. In particular:

- to what extent do participants respond to signals provided by the structure of reserve capacity refund payments; and
- if reserve capacity refunds reflected their impact on the market, how would this be expected to affect compliance or incentives to participate in the reserve capacity mechanism.

## 4.4 The STEM

Some stakeholders have raised concerns about the timing of the STEM.

The timing of the STEM was an issue raised during public consultation for the previous Minister's Report. In that Minister's Report, the Authority noted that moving the STEM gate closure closer to real-time would involve a substantial change to the market and would likely be a costly exercise. Given the lack of clear support for a shift closer to real-time, the Authority considered that retaining the existing arrangement was appropriate at that stage.

Some stakeholders have again raised the issue of moving the STEM gate closure closer to real-time or introducing multiple gate closures. One of the advantages of moving the STEM closer to real-time or introducing multiple gate closures would be that participants would be able to base their bids and offers on more accurate information, including more accurate information about likely demand and about possible gas pipeline constraints. Bids and offers would therefore likely be more reflective of the actual costs that participants would face. Some stakeholders commented that they considered that moving the STEM closer to real-time or introducing multiple gate closures would also encourage participation in the STEM, presumably because the risks of participating in the STEM would be reduced with bidding closer to real-time.

Stakeholders did not necessarily support immediately moving the STEM closer to real-time or introducing multiple gate closures, but were interested in thinking about the process and timing for such a transition.

## Discussion Point 10

The Authority invites comment on the effect of moving the STEM closer to real-time or of introducing multiple gate closures. In particular:

- would this encourage greater participation in the STEM or improve outcomes in the STEM, including through improved price signals;
- would the benefits to participants outweigh the costs to participants; and
- what, if any, barriers are there to such a change and what do these barriers suggest for the timing of such a change.

## 4.5 Balancing

Some stakeholders raised concerns about the current arrangements for balancing.

Some stakeholders commented that the current balancing arrangements expose Verve Energy to differences between real-time dispatch and day-ahead forecasts of dispatch. It was noted that a change to the market rules results in the MCAP now being calculated for each interval, rather than only those intervals for which real-time demand deviates from expected demand by more than five per cent. This was considered to reduce Verve Energy's exposure to forecasting errors in the balancing market. Nevertheless, some stakeholders consider that balancing remains an issue. In particular, some stakeholders commented that changes to fuel availability, plant availability or demand<sup>8</sup> from the time that STEM submissions are due to real-time can expose Verve Energy to costs that it cannot recover through balancing.

This is an issue closely related to the timing of the market. With real-time bids and offers into the STEM and balancing markets, bids and offers could be based on the latest available information on such things as fuel availability, plant availability and demand. As discussed in Section 4.4, the timing of the STEM was raised during the previous Minister's Report, with the Authority concluding that changing the timing of the STEM would be a substantial exercise that lacked clear support from stakeholders. During public consultation for this Minister's Report, some stakeholders again raised the possibility of moving the market closer to real-time, and commented that they were interested in thinking about the process and timing for such a transition. Presumably, moving the market closer to real-time would improve the cost-reflectivity of the balancing prices that Verve Energy receives.

Some stakeholders suggested that another way of reducing Verve Energy's exposure to forecasting errors in the balancing market would be to allow participants to make different STEM offers depending on what type of fuel is used, with the appropriate offer determined on an ex post basis.

During the public consultation for the previous Minister's Report the issue of competitive balancing was raised. In that Minister's Report, the Authority noted that the ability of generators other than Verve Energy to offer real-time balancing at that early stage of the market was substantially constrained, so that achieving a competitive balancing market

<sup>8</sup> The Authority notes that changes in demand from the time that STEM submissions are due to real-time are reflected in MCAP prices. There remains the possibility, however, that participants would vary their STEM bids and offers with improved information on real-time demand.

would be difficult. During public consultation for this Minister's Report, some stakeholders noted that they were interested in thinking about the process and timing for a transition to competitive balancing. Consideration of the longer term development of the market is discussed further in Section 4.14.

#### Discussion Point 11

**The Authority invites comment on the extent to which Verve Energy's exposure to forecasting errors in the balancing market impacts on the effectiveness of the market.**

**The Authority invites comment on barriers to the introduction of competitive balancing, and what these barriers suggest for the shift to more competitive balancing arrangements.**

## 4.6 Ancillary services

During public consultation for the previous Minister's Report the issue of competitive supply of ancillary services was raised, with some stakeholders supporting the promotion of competitive supply arrangements for ancillary services. The Authority notes that the Market Rules provide for System Management to enter into an ancillary service contract with participants other than Verve Energy under certain circumstances, including that doing so is a less expensive alternative to ancillary services provided by Verve Energy. In the previous Minister's Report, the Authority stated that it would continue to monitor developments in the delivery of ancillary services.

#### Discussion Point 12

**The Authority invites comment on the delivery of ancillary services, particularly in regard to the competitive delivery of ancillary services.**

## 4.7 Wind energy

Some stakeholders have raised concerns about the impact of wind energy on the market.

The impact of wind energy on the market was an issue raised during public consultation for the previous Minister's Report. In that Minister's Report, the Authority noted that the arrangements for the treatment of wind generation are the result of consideration given to that issue during the market reform and implementation process, and that it would be inappropriate to consider a change at such an early stage of the market.

Some stakeholders commented that they remain concerned about the impact of wind energy on the market, particularly given that the expanded MRET will lead to significant new investment in renewable energy – particularly wind energy – within the SWIS. Stakeholders suggested that this would have important implications for the market, including the following:

- Because wind energy is intermittent, an increase in the proportion of wind energy in the market may have implications for both the requirements for capacity in the market and the operation of existing base-load plant in the market.

- The location of wind energy may have implications for the network and, in particular, the need to invest in additional network capacity.

Some stakeholders were particularly interested in the treatment of wind energy within the reserve capacity mechanism, and whether the contribution of wind energy to peak demand was adequately reflected in the reserve capacity mechanism.

The Authority notes that the Market Advisory Committee (**MAC**) has established a renewable energy generation working group to consider and assess these issues. In particular, the Working Group will focus on the treatment of renewable energy generation in the reserve capacity mechanism, the allocation of ancillary service charges and low-load compensation mechanisms.

### Discussion Point 13

The Authority invites comment on the impact that wind energy will have on the effectiveness of the WEM. In particular:

- to what extent, if any, will additional wind energy impose costs on the market, and will these costs be borne by the wind energy facilities or by other participants; and
- do the existing arrangements for network connection charges provide signals to wind energy facilities that reflect the impact of these facilities on the market.

## 4.8 Demand-side management

Some stakeholders have expressed concerns about the ability of demand-side management (**DSM**) to participate in the market.

The principal concern that stakeholders raised was that DSM is difficult to achieve under the reserve capacity mechanism because under this scheme DSM is paid the same for the reduction in load that it provides that generators are paid for the capacity that they provide. It was suggested that it is difficult to attract DSM to commit to the market under these conditions, particularly during an economic boom.

On one view, this would support the market objectives: if capacity can be secured at a lower price from generators than from DSM, then securing capacity from generators rather than from DSM would promote the minimisation of the long-term cost of electricity for end-users. However, it may be the case that, in fact, there are barriers to the participation of DSM that prevent DSM from participating in the market. One possibility raised by some stakeholders is that it is the structure of the payment for capacity that deters DSM from participating in the market, and that a restructuring of the payment might address this issue. In particular, it has been suggested that the current payment structure, with fixed monthly payments, more closely reflects the cost structure of generators than it does providers of DSM.

The Authority notes that the MAC has established a DSM Working Group to consider and assess the terms and conditions under which DSM is provided. The group's first meeting was held on 31 January 2008, and it had its sixth meeting on 1 May 2008. The group discussed and developed proposed improvements to enhance the operation of DSM in the reserve capacity mechanism. This process remains ongoing, so that there is some

uncertainty as to the operation of DSM in the market. Nevertheless, the Authority is interested in views on any issues associated with the participation of DSM in the market.

#### Discussion Point 14

The Authority invites comment on the incentives for DSM to participate in the market. In particular:

- what, if any, barriers exist that would prevent the participation of DSM that could otherwise provide capacity at a price competitive with new generation; and
- would an alternative structure for payments for DSM, or an alternative treatment of DSM within the market, encourage the participation of DSM in a way that promotes the market objectives.

## 4.9 Rule change process

Some stakeholders have expressed concerns about responsibility for the rule change process.

Responsibility for the rule change process was an issue raised during public consultation for the previous Minister's Report. In particular, some stakeholders were concerned that the IMO's involvement in the rule change process could lead to a potential conflict of interest. In the previous Minister's Report, the Authority noted that there may be benefits to having a body separate from the IMO responsible for rule change proposals, but that there would also be costs associated with creating an independent body with responsibility for the market rules. The Authority noted that there are arrangements in place to minimise the potential for conflicts of interest to impact on rule change proposals. The Authority noted that it would continue to monitor the processing of rule change proposals in order to assess whether the potential for conflicts of interest to arise is likely to impact on the effectiveness of the market.

Some stakeholders have again suggested that the IMO should not be responsible for both operating the market and administering the market rules. Stakeholders have acknowledged, however, that it is difficult to find an alternative at this stage.

Some stakeholders have also raised other issues with the rule change process. For instance, some stakeholders have commented that the rule change process is very reliant on the Market Advisory Committee (MAC), which was described as a collection of vested interests. Some stakeholders have commented that there should be additional flexibility within the rule change process. Also, some stakeholders have commented that the volume of rule change proposals makes it very difficult for small market participants to provide input.

#### Discussion Point 15

**The Authority invites comment on the rule change process and procedures, the consultation process for rule change proposals and the time taken to have a rule change proposal considered and finalised.**

### 4.10 System management

Some stakeholders have expressed concerns about System Management remaining within Western Power. In particular, some stakeholders commented that moving System Management out of Western Power and joining it with the IMO might be a more appropriate structure. It was suggested that this would ensure System Management's ongoing independence, and may create a situation where System Management could provide external input into Western Power's network planning processes. It was also suggested that joining System Management and the IMO would provide the new organisation with critical mass.

#### Discussion Point 16

**The Authority invites comment on whether System Management remaining within Western Power impacts on the effectiveness of the market and, if so, in what way.**

### 4.11 Transparency

Some stakeholders commented that there is a currently a lack of transparency about the prices for bilateral contracts in the WEM, and that this can have an impact on the effectiveness of the market. It was suggested that transparency might be increased to some extent by surveying market participants as to expectations of buy and sell prices for standard contracts, and reporting aggregated results in some way.

#### Discussion Point 17

**The Authority invites comments on measures to improve price transparency in the market.**

### 4.12 Retail market

Some stakeholders commented on the effect that retail market arrangements have on the WEM. In particular, some stakeholders commented that achieving cost-reflective regulated retail tariffs and the introduction of full retail competition (**FRC**) are both important to the ongoing development of the electricity industry in Western Australia.

The Authority notes that regulated retail tariffs and the introduction of FRC are currently the subject of review by the Office of Energy (**OOE**). The OOE has released a draft recommendations report on electricity tariff arrangements that is currently open for public consultation. The OOE will also shortly release a draft recommendations report on FRC.



The Authority's view is that consideration of appropriate retail market arrangements is beyond the scope of this review, but that retail market arrangements may have an impact on the effectiveness of the WEM. The Authority also recognises that, due to the OOE's ongoing review, there is some uncertainty about the development of retail market arrangements. Nevertheless, the Authority is interested in views about how retail market arrangements might impact on the effectiveness of the WEM.

#### Discussion Point 18

**The Authority invites comments on what, if any, impact retail market arrangements have on the WEM, and what implications this has for the effectiveness of the WEM.**

### 4.13 Ministerial Directions and the Vesting Contract

Some stakeholders commented on measures introduced as part of the reform of the electricity industry in Western Australia.

First, some stakeholders raised general comments on the reform process including the restriction on Verve Energy investing in new generation capacity beyond the threshold of 3,000 MW, and the restriction on Synergy from registering as a Market Generator. Stakeholders commented that it might be appropriate in today's changed circumstances to think about when these restrictions might be removed, and how.

Second, some stakeholders commented on the operation of the Vesting Contract between Verve Energy and Synergy, and how the Vesting Contract interacts with the WEM.

#### Discussion Point 19

**The Authority invites comment on the effect that the Ministerial Directions to Verve Energy and Synergy and the Vesting Contract have on outcomes in the market.**

### 4.14 Longer term market development

A number of issues raised by stakeholders relate to the longer term development of the WEM. For instance, stakeholders raised issues such as moving the STEM closer to real-time or introducing multiple gate closures, developing a competitive balancing market, allowing the reserve capacity price to be determined by a market mechanism, planning for the impact of additional wind energy on the market, and changing the network from an unconstrained network to a constrained network. For the most part, stakeholders considered that addressing these issues is not a matter for the short term, but recognised that these issues are about the longer term development of the market.

In part, this is a reflection of the reform process in Western Australia. As discussed, the reform of the Western Australian electricity market and the introduction of the WEM was designed in such a way as to progress towards more competitive outcomes. However, there are many possible paths towards more competitive outcomes. Some stakeholders commented that it would be useful to develop a road map for the development of the market over the longer term.

The Authority's reports to the Minister on the effectiveness of the market will address issues related to the longer term development of the market and, where appropriate, the Authority will make recommendations to the Minister on measures to increase the effectiveness of the market. However, some stakeholders considered that it would also be useful to put in place an open, consultative process for the systematic development of a road map for the development of the market.

### **Discussion Point 20**

**The Authority invites comment on the processes for planning the development of the market over the longer term. In particular:**

- **to what extent do existing arrangements provide scope for, and transparency in regard to, the development of the market; and**
- **what aspects, if any, of the development of the market should be addressed in a more systematic manner, and in what forum.**