

Independent Market Operator



## **Final Market Rule Change Report**

### **Title: Calculation of MCAP**

Ref: RC\_2008\_05

Fast Track Rule Change Process

Date: 12 February 2008

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## 1. INTRODUCTION

### 1.1. *General Information about Rule Changes*

Clause 2.5.1 of the Wholesale Electricity Market Amending Rules (Market Rules) provides that any person (including the Independent Market Operator) may make a Rule Change Proposal by completing a Rule Change Proposal form and submitting this to the Independent Market Operator (IMO).

In order for the proposal to be progressed, the change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the Wholesale Market Objectives. The market objectives are:

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

A Rule Change Proposal can be processed using a Standard Rule Change Process or a Fast Track Rule Change Process. The standard process involves a combined 10 weeks public submission period. Under the shorter fast track process the IMO consults with Rule Participants who either advise the IMO that they wish to be consulted or the IMO considers have an interest in the change.

### 1.2. *About this Rule Change*

On 4 January 2008, Verve Energy submitted a Rule Change Proposal titled “Calculation of MCAP”.

The proposal was processed using the Fast Track Rule Change Process, described in section 2.6 of the Market Rules. The fast track process was used as the proposal satisfied the requirements of clause 2.5.9 (c) of the Market Rules.

The fast track process adheres to the following timelines, outlined in section 2.6 of the Market Rules:

- Within 5 Business Days of a Rule Change Notice being published, the IMO must notify any Rule Participants that the IMO intends to consult regarding the Rule Change.

- Within 5 Business Days of the Rule Change Notice being published, any Rule Participant wishing to be consulted may contact the IMO to request consultation on the Rule Change.
- Within 15 Business Days of the Rule Change Notice being published, all consultations must be concluded.
- Within 20 Business Days of the Rule Change Notice being published, the IMO must publish a Final Rule Change Report.

The key dates in processing this Rule Change Proposal were:

- The Rule Change Notice for this Proposal was published on the IMO website on 14 January 2008.
- On 14 January 2008, the IMO notified interested parties that it wished to consult regarding the Rule Change.
- Consultations on the Rule Change Proposal were completed on 5 February 2008.
- This Final Rule Change Report was published on 12 February 2008.

This Final Rule Change Report on the Rule Change Proposal has been prepared by the IMO in accordance with clause 2.6.4 of the Market Rules.

Based on its analysis against the market objectives and the responses received from interested parties, the IMO's decision is to implement the Rule Change Proposal in the form outlined in this Final Report.

## 2. THE RULE CHANGE PROPOSAL

### 2.1. The Submission

Verve Energy submitted, on 4 January 2008, a Rule Change Proposal regarding changes to clauses 6.14.2 and 6.14.4 in the Wholesale Electricity Market Rules.

#### 2.1.1. Submission details

Name:	Andrew Everett
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Address:	Level 11, Australia Place, 15-17 William St, Perth, WA, 6000
Date submitted:	4 January 2008
Urgency:	3 - High

### 2.2. The Proposal

Verve Energy submitted that it has the obligation to follow the load in the Wholesale Electricity Market and, unlike Independent Power Producers (IPPs), cannot specify pay-as-bid prices for energy scheduled to balance the market. Whenever Verve Energy deviates from its net contract position it is exposed to the Marginal Cost Administrated Price (MCAP), which may not reflect the true cost of the energy being dispatched.

Verve Energy submitted that MCAP is determined by the Short Term Energy Market (STEM) auction, and only recalculated if the Relevant Quantity (i.e. the sum of the estimated Operational System Load, curtailed demand and Resource Plan shortfalls), for a Trading Interval is not between 95% and 105% of the Scheduled System Load for that Trading Interval. Verve Energy also submitted that even small percentage fluctuations in the Relevant Quantity can affect the type of Verve Energy plant dispatched up or down by System Management.

Further, Verve Energy contended that significant fluctuations in the value of the Relevant Quantity are caused when IPPs, other than Verve Energy, deviate upwards from their Resource Plans. Verve Energy submitted that in order to arrive at a competitive market MCAP such deviations should be reflected in the Relevant Quantity, which already takes into account downward deviations of IPP plant.

To address these two issues, Verve Energy proposed that MCAP should always be recalculated for each Trading Interval and that the calculation of the Relevant Quantity should be amended, to also reflect upward deviations by Market Generators from their Resource Plans.

According to Verve Energy's proposal, with these amendments the Market Rules will more accurately reflect the market cost of the dispatched generation and lead to more accurate prices for balancing energy, where these prices could be either higher or lower than those calculated under the current Market Rules.

Verve Energy submitted that the cumulative effect of any failure to accurately reflect the cost of generation may, over time, have a significant detrimental financial impact for some Market Participants, while inappropriately rewarding others.

### **2.3. Amending Rules Proposed by Verve Energy**

The amendments to clauses 6.14.2 and 6.14.4 proposed by Verve Energy can be found in Section 5 of this Report.

### **2.4. The IMO's Initial Assessment of the Proposal**

The IMO decided to proceed with the Rule Change Proposal on the basis of its preliminary assessment, which indicated that the proposal was consistent with the Market Objectives.

The proposal was processed using the Fast Track Rule Change Process described in section 2.6 of the Wholesale Electricity Market Rules. The fast track process was used as the proposal satisfied the requirements of clause 2.5.9 (c) of the Market Rules. The IMO considered that the change was essential for the effective operation of the market and, in order to avoid future negative financial implications for Market Participants, it should be progressed using the Fast Track Rule Change Process.

Section 2.5.9 states:

*The IMO may subject a Rule Change Proposal to the Fast Track Rule Change Process if, in its opinion, the Rule Change Proposal:*

- (a) is of a minor or procedural nature; or*
- (b) is required to correct a manifest error; or*
- (c) is urgently required and is essential for the safe, effective and reliable operation of the market or the SWIS.*

### 3. RULE PARTICIPANTS CONSULTED

For this Rule Change, the IMO notified the following interested parties of its intention to consult:

- Alcoa World Alumina Australia
- Alinta Sales Pty Ltd
- Barrick (Kanowna) Limited
- Bioenergy Limited
- Economic Regulation Authority
- Eneabba Gas Pty Ltd
- Griffin Energy
- Karara Energy
- Landfill Gas and Power Pty Ltd
- Mount Herron Engineering
- NewGen Neerabup Pty Ltd
- NewGen Power Kwinana Pty Ltd
- Newmont Asia Pacific
- Office of Energy
- Perth Energy Pty Ltd
- Premier Power Sales Pty Ltd
- Skyfarming Pty Ltd
- Synergy
- System Management
- TransAlta Energy
- Verve Energy
- Wambo Power Ventures
- Waste Gas Resources Pty Ltd
- Water Corporation
- Western Australia Biomass Pty Ltd (Babcock and Brown)
- Western Power Corporation

The IMO indicated that it would hold a workshop on 23 January 2008 and invited interested parties to attend the workshop. The IMO also requested interested parties to provide their views on the Rule Change Proposal in writing.

In addition, an invitation for all Rule Participants to contact the IMO, should they wish to be consulted on this Rule Change, was published on the IMO website on 14 January 2008, together with the Rule Change Notice.

Alinta Sales, the Economic Regulation Authority (ERA), Griffin Energy, Office of Energy, System Management, Synergy and Verve Energy attended the workshop.

The IMO also received written submissions from Alinta Sales, Eneabba Gas, Landfill Gas and Power, and Synergy.

Below is a summary of the workshop deliberations and feedback received through submissions.

### **3.1. Market Advisory Committee**

The Market Advisory Committee (MAC) was invited to have preliminary discussions on the Proposal at its meeting on 12 December 2007, before it was formally submitted by Verve Energy.

MAC expressed general support for the Rule Change Proposal.

### **3.2. Workshop**

A workshop on the Rule Change Proposal was held by the IMO on 23 January 2008. The workshop was attended by Alinta Sales, ERA, Griffin Energy, Office of Energy, Synergy, System Management, Verve Energy and the IMO. The IMO presented the proposed rule changes. The workshop participants endorsed the proposal to remove the thresholds for when MCAP is recalculated. The workshop participants also agreed that the Relevant Quantity should reflect upward deviations by Market Generators from their Resource Plans.

### **3.3. Alinta Sales**

Alinta supported the implementation of the proposal. Alinta agreed that it is important to ensure that MCAP is as cost reflective as practicable in order to drive efficient outcomes in the market and ensure fair cost recovery for the balancing generator. According to Alinta, removing the thresholds will improve in achieving a cost reflective balancing price.

Alinta also supported in principle the proposal of reflecting upward deviations when calculating the Relevant Quantity. While agreeing that it is more consistent to allow MCAP to take into account both upwards and downwards deviations, Alinta noted that the proposal may introduce an adverse effect on Intermittent Generators, wind farms in particular, when they spill energy during the night. Alinta submitted that this issue may need to be addressed if the outcomes of this proposal severely impact on the financial viability of Intermittent Generators, but acknowledged that this may be better dealt with outside of the market.

### **3.4. Eneabba Gas**

Eneabba Gas expressed its support for the Rule Change Proposal. Eneabba submitted that the current Market Rules do not provide for an equitable and fair price to Verve Energy. Further, the current Market Rules do not penalise other generators when their upward deviations have negative financial impact on Verve Energy as the balancing generator. Eneabba Gas considered that the proposal will enhance competition and also ensure correct management of energy within the SWIS.

### **3.5. Landfill Gas and Power (LGP)**

LGP expressed its support for the Rule Change Proposal. LGP submitted that the change is essential for the effective operation of the market in order to avoid future negative financial implications for Market Participants. Further, LGP agreed that the load following service provided by Verve Energy should be permitted to recover the full cost

of energy dispatched, and Verve Energy should not be penalised for IPP deviations from their Resource Plans. LGP considered that implementing the proposal will provide for more accurate prices for balancing energy.

### **3.6. Synergy**

After attending the workshop, Synergy provided a submission in which it expressed its support for the Rule Change Proposal.

## 4. THE IMO'S ASSESSMENT AND DECISION

### 4.1. Assessment

#### 4.1.1. Consultations

All parties responding to IMO's request for consultation expressed support for Verve Energy's proposal. No party proposed any changes to the amendments proposed by Verve Energy.

While expressing its general support for the changes, Alinta was concerned that allowing upward deviations to be included when calculating the Relevant Quantity may have an adverse impact on Intermittent Generators spilling energy into the SWIS, as this may provide for a lower MCAP to be calculated. While acknowledging Alinta's concern, the IMO also notes that Alinta in its submission expressed its support for a cost reflective and efficient balancing price. This would need to take into account both upward and downward deviations from participant Resource Plans.

#### 4.1.2. Additional Amendments

The IMO has also made a minor modification to the proposed rule change to correct an inaccurate reference resulting from the proposal. Clause 6.14.3 of the Market Rules currently has a reference to clause 6.14.2(b)(i). As part of Verve Energy's Rule Change Proposal, subsections (i) and (ii) of clause 6.14.2(b) will be removed. Therefore, the reference in clause 6.14.3 needs to be amended to refer to clause 6.14.2(b).

#### 4.1.3. The IMO's Assessment

According to clauses 2.4.2 of the Market Rules *"the IMO must not make Amending Rules unless it is satisfied that the Market Rules, as proposed to be amended or replaced, are consistent with the Wholesale Market Objectives"*.

The IMO' assessment against each of the Market Objectives is as follows:

- (a) *to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system.*

The IMO considers that the proposal supports market objective (a) by allowing the balancing price to better reflect the true cost of the electricity generated. This would provide for a more economically efficient outcome than that under the current Market Rules.

- (b) *to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors.*

The IMO notes that the current 5% thresholds in the Market Rules, before MCAP is recalculated, were set due to concerns regarding the potential exercise of market power in bidding behaviour. However, the practical operation of the market has suggested that the thresholds may have negative impact on the market outcomes, as a result of the risk that they introduce for the balancing generator.

The IMO considers that this rule change proposal supports market objective (b) by providing more accurate and market reflective prices for energy traded through the balancing mechanism. In their submissions, Alinta, Eneabba Gas and LGP supported this assessment.

- (c) *to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions.*

The IMO considers that the proposed changes do not impact on, and therefore are consistent with, the operation of market objective (c).

- (d) *to minimise the long-term cost of electricity supplied to customers from the South West interconnected system*

The IMO considers that the proposed changes do not impact on, and therefore are consistent with, the operation of market objective (d).

- (e) *to encourage the taking of measures to manage the amount of electricity used and when it is used.*

The IMO considers that the proposed changes do not impact on, and therefore are consistent with, the operation of market objective (e).

In accordance with Clause 2.4.3(b) of the Market Rules, in deciding whether or not to make Amending Rules, the IMO must also have regard to the practicality and cost of implementing the amendments.

The implementation of these rule changes will require changes to the Wholesale Electricity Market Systems operated by the IMO. The cost for implementing these changes has been estimated at \$28,000. The IMO has found this cost to be acceptable and considers that the benefits the change will bring to Market Participants will outweigh the cost.

No other costs have been identified in relation to this change during the consultation process.

#### **4.2. The IMO's Decision**

The IMO's decision is to:

- Accept the amendments to clause 6.14.2 and 6.14.4 of the Wholesale Electricity Market Rules, as proposed by Verve Energy in its Rule Change Proposal. This will enable MCAP to always be recalculated, and the Relevant Quantity to take into account both upward and downward deviations of Market Generators, other than Verve Energy, from their Resource Plans.
- Amend clause 6.14.3 to change the reference to clause 6.14.2(b) instead of clause 6.14.2(b)(i).

The IMO has made its decision on the basis that the resulting Amending Rules are consistent with the Wholesale Market Objectives.

The wording of the relevant Amending Rules is presented in Section 5 of this Report.

#### **4.3. Amending Rules Commencement**

The amendments to clauses 6.14.2, 6.14.3, and 6.14.4 of the Wholesale Electricity Market Rules will commence at 08.00am on 20 March 2008.

## 5. AMENDING RULES

The following clauses are amended as follows (~~deleted wording~~, new wording):

### **Clause 6.14.2**

6.14.2. The value of MCAP for a Trading Interval is calculated as follows:

- (a) If the STEM Auction was suspended for the Trading Interval under clause 6.10.1, and the process described in clause 6.9 cannot subsequently be completed by the time MCAP must be published under clause 6.14.1, the IMO must determine MCAP for the Trading Interval to be the value of MCAP for the equivalent Trading Interval:
  - i. if the IMO is determining MCAP for a Business Day, MCAP will be the value for the most recent Trading Day in the past which is a Business Day and commenced on the same day of the week;
  - ii. if the IMO is determining MCAP for a day which is not a Business Day, MCAP will be the value for the most recent Trading Day in the past which is not a Business Day.
- (b) If the STEM Auction was not suspended for the Trading Interval under clause 6.10.1, or was suspended but the process described in clause 6.9 can subsequently be completed for the purposes of this clause by the time MCAP must be published under clause 6.14.1, ~~then:~~
  - i. ~~If any of the following circumstances apply, then MCAP must be calculated in accordance with clause 6.14.3:~~
    - 1. ~~[Blank]~~
    - 2. ~~the Relevant Quantity for the Trading Interval is not between 95% and 105% of the Scheduled System Load for that Trading Interval.~~
    - 3. ~~[Blank]~~
    - 4. ~~[Blank]~~
  - ii. ~~If paragraph (i) does not apply then MCAP equals the STEM Clearing Price for that Trading Interval.~~

### **Clause 6.14.3**

6.14.3. Where MCAP is to be calculated in accordance with this clause under clause 6.14.2(b)(i):

- (a) subject to clause 6.9.4 the IMO must determine MCAP Price Curves for each Market Generator for the relevant Trading Interval in accordance with Appendix 6 using the valid STEM Submissions and Bilateral Submissions relating to that Trading Interval;

**Clause 6.14.4**

6.14.4. For the purposes of clauses ~~6.14.2 and~~ 6.14.3:

- (a) the “Operational System Load Estimate” for a Trading Interval is the estimate that the IMO receives from System Management of the total Loss Factor adjusted MWh consumption supplied via the SWIS during that Trading Interval. This estimate equals the total loss adjusted generator sent out energy as estimated from generator operational meter data and the use of state estimator systems;
- (b) the “Resource Plan Load” for a Trading Interval is total consumption as specified in applicable Resource Plans relating to that Trading Interval, including for Interruptible Loads, Curtailable Loads, Dispatchable Loads and Non-Dispatchable Loads; and
- (c) the “Scheduled System Load” for a Trading Interval is the sum of:
  - i. the sum over all Resource Plans for that Trading Interval of the total Loss Factor adjusted generation scheduled in each Resource Plan;
  - ii. the sum over all Resource Plans of the shortfall quantity for that Trading Interval as described in clause 6.11.1(e); and
  - iii. the Net Contract Position of the Electricity Generation Corporation for that Trading Interval.
- (d) the “Relevant Quantity” equals:
  - i. the Operational System Load Estimate for the Trading Interval; plus
  - ii. IMO’s estimate of the total MWh demand curtailed during that Trading Interval (if any); ~~minus plus~~
  - iii. the IMO’s estimate of the amount by which energy provided by Market Generators other than the Electricity Generation Corporation ~~falls short of~~ deviates from the relevant Resource Plan quantities. This estimate equals:
    - 1. the Operational System Load Estimate for the Trading Interval; minus
    - 2. the total Loss Factor adjusted generator sent out energy of the Electricity Generation Corporation based on SCADA data for the Trading Interval; minus
    - 3. the sum over all Resource Plan Submissions of the total Loss Factor adjusted sent out energy included in each Resource Plan for the Trading Interval; minus
    - 4. the sum over all Resource Plan Submissions of the absolute value of each shortfall included in accordance with clause 6.11.1(e) for the Trading Interval