

Wholesale Electricity Market Rule Change Proposal Submission Form

RC_2011_10 Competitive Balancing and Load Following Market

Submitted by

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Date submitted:	7 November 2011

Submission

- Please provide your views on the proposal, including any objections or suggested revisions.**

Background

The Wholesale Electricity Market (WEM) has been operating since 21 September 2006 and is now in its 6th year of operation. Prior to the establishment of the WEM there were only limited opportunities for individual power producers (IPPs) to participate in the wholesaling of electricity through the Top Up and Spill (TUAS) market that was in place. The introduction of the WEM significantly increased the opportunities for IPPs and independent retailers to enter the market to trade both energy and capacity bilaterally. The WEM also has in place mechanisms for fine tuning portfolio positions by trading small quantities in the daily run Short Term Energy Market (STEM). Since the start of the WEM the dominance of both Synergy and Verve Energy in the retail and generation markets respectively, while remaining significant, has diminished.

Verve Energy is afforded a special role in the current WEM design by being the default provider of balancing energy and ancillary services. This is an arrangement that has worked well in ensuring a smooth transition from what was essentially a fully vertically integrated electricity provision via the old Western Power company prior to WEM market start to a

competitive market place encouraging the entry of private sector investment on both the generation and retail side of the market.

With the significant increase in private sector investment in the WEM over the last few years the market has evolved quickly. It became apparent that for the WEM to evolve further and become more efficient it would be necessary to consider opening up the provision of balancing energy provision and the provision of ancillary services to all parties, rather than limiting this to Verve Energy only.

The Market Advisory Committee (MAC) identified improving the mechanism for providing balancing services as a top priority in August 2009. In August 2010, the Independent Market Operator (IMO) presented to the MAC the options that had been identified by the Market Design Review Team (MDRT). The MAC decided to pursue an option of “evolutionary” change rather than a fundamental change to the market rules concerning balancing and ancillary services. The IMO Board endorsed this view.

The Rules Development Implementation Working Group (RDIWG) was subsequently established to work out the detailed implications of the proposed changes, including a formal Rule Change Proposal.

Change Proposal

The IMO submitted Rule Change Proposal RC_2011_10 “Competitive Balancing and Load Following Market” on 23 September 2011. The Rule Change Proposal is the result of significant work by the RDIWG, the IMO and all Market Participants over the last year through working group meetings, public workshops and informal consultations along the way.

The proposed changes are significant and detailed. At a high level they can be described as follows:

- Market Participants will continue to schedule contracts bilaterally and will have to submit Resource Plans to match their bilateral position, including any accepted bids and offers in the STEM,
- Market Participants will also submit bids and offers to deviate from Resource Plans along with ramp rates for such deviations. Bids and offers to deviate from Resource Plans can be re-submitted until gate closure (which will be between 2 and 6 hours from real time),
- The IMO will calculate a Balancing Merit Order (BMO) based on economic dispatch using all bids and offers to deviate from Resource Plans (including Verve Energy’s submission) and provide the BMO to System Management,
- System Management will use the BMO for balancing purposes in real time. System Management may deviate from the BMO when necessary. Facilities that are dispatched outside their merit order will receive constrained on / off payments,
- The IMO will calculate the marginal balancing price ex-post,

- All energy imbalances will attract the new marginal balancing price and the current UDAP and DDAP prices will no longer apply,
- Verve Energy must and other Market Participants may make submissions for Load Following Ancillary Services (LFAS). The IMO will take LFAS submission into account when constructing the BMO.

Perth Energy's Views

Perth Energy welcomes and supports the IMO's Rule Change Proposal to introduce competitive pressure in the balancing market and in the load following market. These changes are the logical next steps in further opening up the WA energy market to private sector investment and competitive tension.

The introduction of the WEM in September 2006 has resulted in significant increases in private sector investment in the WA energy sector bringing new and more efficient power stations into the WA energy mix. On the retail side there has been a similar increase in the number of retailers competing with the incumbent, Synergy, to supply large and medium sized electricity customers. The efficiencies and competitive pressures that have been experienced over the last five years would not have been possible without the introduction of the WEM.

However, the design of the WEM has from the start been limiting potential efficiency gains in the market due to the fact that a significant portion of generators (all IPPs) have been excluded from providing real time balancing and load following services. This may not have been a significant issue in the early days of the WEM when Verve Energy still owned most Facilities capable of providing these services. However, with the steady increase in new, efficient and flexible IPP generators, continuing to exclude IPPs from the provision of balancing and load following services would be detrimental to achieving the Market Objectives¹. Continued exclusion of non-Verve Energy Facilities would be detrimental to the achievement of Market Objectives (a) relating to efficiency, (b) relating to competition and (d) relating to long term cost of electricity production.

¹ The objectives of the market are:

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

Perth Energy considers that the proposed changes would significantly increase competition in the provision of balancing and load following services and by extension increase the efficiency in the provision of these services. The change proposal will allow all Facilities in the WEM to compete to provide these services. It is likely that some IPP Facilities that have so far been excluded from competing to provide these services are more efficient at providing these services and therefore will be able to bid in at a more competitive price than some of the less efficient units in Verve Energy's portfolio. Perth Energy welcomes the opportunity to bid its own units in to provide balancing and ancillary services.

Perth Energy also welcomes the risk mitigating properties of the Rule Change Proposal. With the current WEM Market Rules it is impossible for an IPP to use the market to mitigate risk exposure to short term changes in its portfolio such as responding to a Forced Outage. Once the STEM has been cleared in the morning and Resource Plans have been submitted by mid-day positions are locked in for the 24 hour period starting 8AM the next morning. With the changes introduced with the Rule Change Proposal participants will be able to mitigate an event like a Forced Outage or unforeseen changes in demand patterns by actively bidding into the balancing market up to 2 to 6 hours ahead of real time (gate closure).

Perth Energy supports the proposed changes to the calculations of the price that will apply to energy imbalances. Under the Rule Change Proposal all energy imbalances will be subject to the ex-post calculated marginal balancing price. This price will simply be the marginal price used in balancing rather than the more complicated calculation of MCAP, UDAP and DDAP involving multiplier factors that applies at present. The proposed new, pure marginal balancing price will provide the market with a simpler to understand and more cost reflective price of balancing energy, raising efficiency in the WEM.

Perth Energy acknowledges the significant amount of work put into preparing these proposals by both the IMO and Market Participants through participation in workshops, working groups and consultations over the last year. However, despite such efforts, Perth Energy considers it likely that there may be some unforeseen problems arising from these changes. Should that occur, the IMO must be prepared to be flexible in its interpretation of the new amending rules to ensure the intent of the changes are implemented. The IMO should also be prepared to consult on Fast Track Rule Changes to rectify any manifest errors that may be identified.

Perth Energy advocates a cautious approach to implementing the changes. There are many IT system changes for the IMO, System Management and Market Participants that will need to be implemented properly ahead of go-live for the proposed changes. In addition, training and familiarisation with the new rules for staff at all organisations involved with the market will also need to take place ahead of go-live. The IMO should allow for the possibility of

delays to the go-live date to ensure that all Market Participants are ready for the changes when they occur.

2. Please provide an assessment whether the change will better facilitate the achievement of the Market Objectives.

Perth Energy considers the Rule Change Proposal would positively impact on the achievement of Market Objectives (a), (b) and (d) with no detrimental impacts on the remaining Market Objectives.

In relation to Market Objective (a) which relates to economic efficiency and the safe and reliable production of electricity, Perth Energy considers the main beneficial impact of the Rule Change Proposal will be that it will specifically allow all IPP Facilities to participate in the provision of balancing and load following services, and for the system to secure such services in the most cost effective and efficient manner. Many of the current IPP facilities have characteristics that make them suitable for providing such services and in many instances these facilities will be more efficient at providing services compared to some of the more marginal units in Verve Energy's portfolio. With the proposed changes System Management will no longer be forced to use less efficient Verve Energy units when an IPP facility is available to provide balancing or load following services cheaper and more efficiently. This will lead to a more efficient economic outcome for system balancing with a positive impact for Market Objective (a).

Allowing IPP Facilities to compete for services that they are currently not allowed to compete for will obviously widen the pool of Facilities available to System Management for these services with an immediate positive impact on competition in the market and therefore Market Objective (b).

Increased competition and efficiencies will in Perth Energy's view likely positively impact on the long term cost of producing electricity. In addition, the increased ability of participants to mitigate certain risks by adjusting positions closer to real time is also likely to lower the overall risk of participating in the WEM. This should over time lead to savings both in direct risk related costs as well as costs related to obtaining funding for projects in the WEM. Perth Energy considers all of these factors are likely to positively impact on the achievement of Market Objective (d).

3. Please indicate if the proposed change will have any implications for your organisation (for example changes to your IT or business systems) and any costs involved in implementing these changes.

There will be an impact on Perth Energy's IT systems and its business procedures. These impacts are currently being assessed. Perth Energy believes it should be able to implement necessary changes for start of Q2 2012.

4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.

Perth Energy is currently on track to implement necessary changes to its systems.