

#### **RULE CHANGE EXTENSION NOTICE**

# **COMPETITIVE BALANCING AND LOAD FOLLOWING MARKET**

(RC\_2011\_10)

This notice is given under clause 2.5.7 of the Market Rules.

Date Submitted: 23 September 2011

Date Extended: 5 December 2011

**Submitter:** Douglas Birnie, the Independent Market Operator (IMO)

#### THE PROPOSAL

The proposal seeks to establish new Balancing and Load Following Ancillary Services markets. The proposed amendments have been developed following feedback from Market Participants and the findings of the Verve Energy Review which both identified concerns with the current sole-provider balancing and load following ancillary service arrangements under the Wholesale Electricity Market (WEM). These new proposed markets will enable competition in the provision of both services and thereby improve the efficiency of the WEM and address the concerns previously raised. The proposed amendments have been developed in consultation with Rules Development Implementation Working Group which was constituted under the auspices of the Market Advisory Committee.

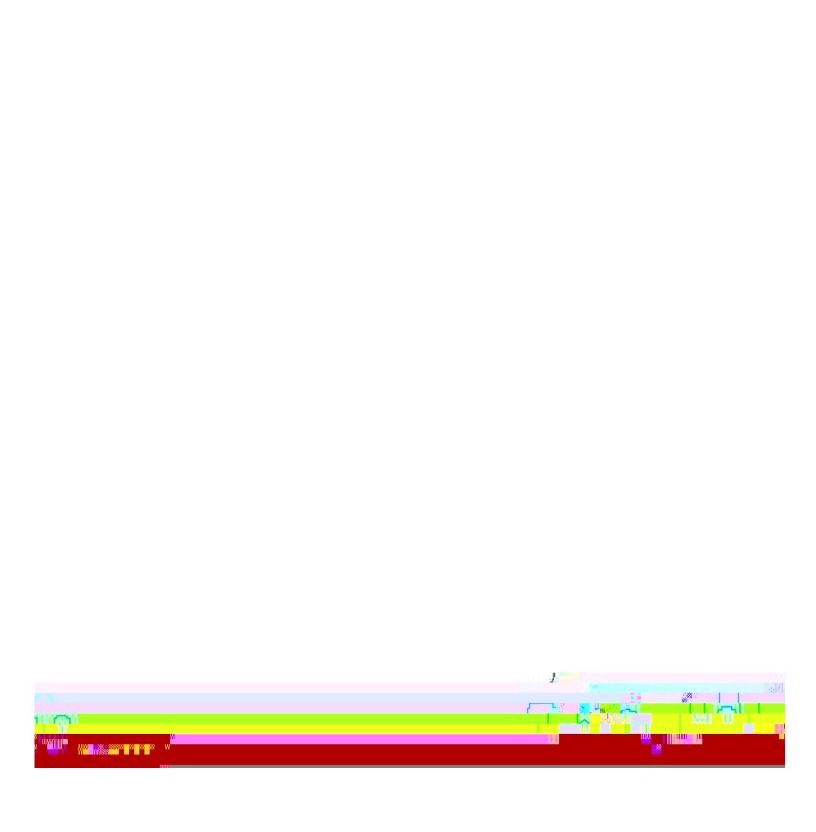
Appendix 1 contains the Rule Change Proposal and gives complete information about:

the proposed amendments to the Market Rules;

relevant references to clauses of the Market Rules and any proposed specific amendments to those clauses; and

the submitter's description of how the proposed amendments would allow the Market Rules to better address the Wholesale Market Objectives.





# **Appendix 1**

# Wholesale Electricity Market Rule Change Proposal

# RC\_2011\_10: Competitive Balancing and Load Following Market

Change Proposal No: RC\_2011\_10 Received Date: 23 September 2011

#### Change requested by:

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Address:	Level 3, Governor Stirling Tower, 197 St Georges Terrace
Date submitted:	23 September
Urgency:	High
Change Proposal title:	Competitive Balancing and Load Following Market
Market Rule(s) affected:	**Numerous**

# Introduction

Market Rule 2.5.1 of the Wholesale Electricity Market Rules provides that any person (including the IMO) may make a Rule Change Proposal by completing a Rule Change Proposal Form that must be submitted to the Independent Market Operator.

This Change Proposal can be posted, faxed or emailed to:

#### **Independent Market Operator**

Attn: Manager Market Development

PO Box 7096

Cloisters Square, Perth, WA 6850

Fax: (08) 9254 4339

Email: market.development@imowa.com.au

The Independent Market Operator will assess the proposal and, within 5 Business Days of receiving this Rule Change Proposal form, will notify you whether the Rule Change Proposal will be further progressed.

In order for the proposal to be progressed, all fields below must be completed and the

- (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

Opportunities for Market Participants to adjust their bilateral positions through the STEM.

Continuance of the System Management / Verve Energy relationship (portfolio based, gross dispatch).

Energy supplied in the market determined by:

- IPPs operating their facilities in accordance with Resource Plans, but subject to net dispatch by System Management; and
- o Verve Energy being dispatched on a portfolio basis.

Verve Energy continuing to be the default provider of Ancillary Services (AS).

# **Overview of Proposed Arrangements**

Under the proposed arrangements, Verve Energy will remain the default provider of ancillary services and System Management will continue to dispatch the Verve Energy portfolio as a service to Verve Energy. However, under the proposal, IPPs will be able to submit price based bids to compete with the Verve portfolio in balancing and LFAS markets. Following the existing STEM process:

IPPs will submit Resource Plans, as now but indicating MW levels and ramping rates at which they will operate their st Tc0.e6g operaete 08nueng thebf-3.86-s, as now i ontractu

Verve Energy will submit a series of price-quantity pairs for each Trading Interval for its available capacity. I.e. a Portfolio Supply Curve (PSC) for each interval. PSCs will be along the lines of Vrv submisypr0 8heyin MW for

IPPs will make facility Balancing Submissions for each Trading Interval ind--4.9(cnueng )5.8(t)-7.4(h)-2(e below the faciRelan. It will be a requirement that all three tall thr

The IMO will create a Balancing Merit Order, ranking balancing submission quantities in price order. In forming the Balancing Merit Order, the IMO will take into account any capacity affected by the selection of LFAS.

The IMO will provide the Balancing Merit Order to System Management (without prices) for planning and dispatch purposes.

The IMO will prepare forecasts of expected IPP facility/ Verve Energy Stand Alone Facilities (VSAF) and Verve Energy Portfolio dispatch and balancing market prices for each Trading Interval, and publish forecast quantities to the relevant Market Participant and market prices to all Market Participants. LFAS quantities and prices will be included in forecasts on the same basis.

System Management will review forecast generation dispatch and the Balancing Merit Order, plan for expected dispatch and prepare and update the Verve Energy Dispatch Plan for meeting expected Verve Energy Portfolio quantities and LFAS requirements.

Market Participants will have opportunities to review and update their balancing and LFAS submissions in light of market forecasts and their facility/ fuel status.

The above cycle will iterate towards dispatch until gate closure when submissions are locked in, except for bona fide physical reasons (e.g. Forced Outages).

In each Trading Interval, System Management will instruct accepted LFAS enablement MW bands and dispatch IPP/VSAF facilities and the Verve Energy Portfolio in accordance with the Balancing Merit Order unless it is necessary to deviate in order to ensure system security requirements are met.

IPPs and Verve individual facilities (outside of its portfolio) will operate to dispatch instructions from Sys TD0.faer r5.8(d)2.9E.3(y)-1.272 TD0.0012 TD6( Mer7.3( )-5.8(n)5.4(e)-0.4(cess)7.3

A more detailed description of the new balancing and LFAS market arrangements can be found at www.imowa.com.au/RDIWG/ New Balancing Market Proposal: Design Details.

#### Key areas of focus with the new arrangements

This Rule Change Proposal addresses a number of concerns about the existing arrangements identified during consultation with Market Participants, the MAC and the Verve Energy Review. Particular areas of focus are as follows.

#### Key focus 1: Increasing IPP Participation in Balancing

This Rule Change Proposal enables all Market Generators to make price based submissions for balancing, update submissions in response to market forecasts and expected dispatch, and be dispatched with certainty about payments. It also provides opportunities for Verve Energy to move towards facility based bidding over time and be treated on the same basis as IPP facilities.

A range of options to facilitate increased IPP participation in balancing within the current hybrid market design were considered by the MRDT and subsequently shared with the RDIWG. This included contractual alternatives such as undertaking a second STEM run or multiple STEM style auctions. However, there was a strong preference for increasing participation in balancing through price based physical dispatch of balancing resources. A number of simpler options were also considered and discounted in favour of the proposed design. This included the possibility of the market facilitating balancing support contracts (BSCs) - given that the current Market Rules provide for System Management or Verve Energy to enter into a BSC but none have been since Market Start – and options suggested by a Market Participant and by System Management. None were considered to provide sufficient opportunity to enable IPPs to participate effectively in the provision of balancing as provided by the new market arrangements proposed in this paper.

# Key focus 2: Consistency between the balancing price and dispatch

At present, the balancing price (MCAP) for each Trading Interval is established from participants' STEM supply submissions, ranked in price order, and the actual level of supply and demand in the interval. There are a number of limitations with this approach. For

based on LFAS prices only, compared to market-based co-optimisation methods which select balancing and LFAS simultaneously (although in time more complex methods/ systems could be introduced).

Verve Energy will remain the default LFAS provider as it is likely, at least initially, that alternatives will be limited relative to overall requirements. As default provider Verve Energy will also submit a price for providing back-up LFAS in the event of a facility failure.

# Key focus 5: Flexibility/efficiency

The current MCAP pricing curve is established approximately 24 hours before the Trading Day starts and 48 hours before it ends. Uncertainties over this time frame compound the inconsistencies between pricing and dispatch noted above. For example, Verve Energy submits its supply curve before Market Participants' net contract positions and IPP Resource Plans are confirmed; demand and intermittent generation can vary significantly from day-ahead forecasts; Forced Outages can occur.

Further, opportunities to respond to changing market requirements (e.g. due to changing

# Key focus 6: Surveillance and Compliance

As noted above in relation to the removal of DDAP and UDAP, there will be a stronger emphasis on compliance monitoring to detect and sanction inappropriate behaviour. This philosophy is reflected through the proposed amendments and will require a more proactive approach to compliance. For example, the proposed Amending Rules impose obligations of acting in good faith on Market Participants. Accordingly, the IMO plans to expand its compliance team, with a greater emphasis on data analysis including automated monitoring of participant activity.

An important focus of compliance monitoring will be to identify behaviour that attempts to manipulate the accuracy of the market forecasts which Market Participants will rely on to make decisions. For example, IMO scrutiny could be triggered by significant changes in bidding behaviour, especially closer to gate closure, late declarations of Forced Outages or

establish a default preference for the transparency of information unless the IMO – following consultation – deems confidentiality in a particular circumstance is justified. The proposed amendments set out the IMO's decision making rights, its obligation to consult before deeming certain information to be confidential, the rights of those who have access to the confidential information, and to specify certain information that must be made available. Better transparency of information will be a critical factor in the efficient operation of the balancing market in particular but will also provide benefits to the operation of the STEM and LFAS markets.

# Supplementary focus: Additional changes

Given the extent of the changes proposed to the Market Rules, the opportunity has also been taken to:

Address a number of minor and typographical errors identified in the course of reviewing the Market Rules for the balancing and LFAS market and new confidentiality arrangements;

Adopt a more output/outcome based approach in the drafting of the proposed Amending Rules to remove unnecessary prescription and complexity and encourage alternatives/innovation where this is appropriate.

The IMO considers that these changes will improve the effectiveness and efficiency of the operation of the Market Rules.

#### Civil penalty clauses, reviewable decisions and protected provisions

A number of changes are proposed to the civil penalty provisions, reviewable and protected provisions. The IMO is proposing to have the following changes reflected in the list of civil penalty provisions in the Electricity Industry (Wholesale Electricity Market) Regulations 2004:

PROVISION TYPE	CLAUSE	PENALTY		
Civil Penalty		Category	1st Breach	Subsequent breaches
New civil penalty and related clause	2.13.13A	С	\$50,000	\$100,000
	7.10.3A	С	\$50,000	\$100,000
	7A.2.8	С	\$50,000	\$100,000
	7A.2.9	С	\$50,000	\$100,000
	7A.2.13	С	\$50,000	\$100,000
	7A.2.16	С	\$50,000	\$100,000
	7B.2.10	С	\$50,000	\$100,000
	7B.2.13	С	\$50,000	\$100,000
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Existing civil penalty clause with only wording to be amended	3.11.7A	С	\$50,000	\$100,000

7.7.9(b)	С	\$30,000	\$60,000
7.9.1	С	\$30,000	\$60,000
7.10.1	С	\$50,000	\$100,000
7.10.3	С	\$30,000	\$60,000
7.10.6 (refers to amended clause 7.10.5)	С	\$35,000	\$70,000
7.10.6A	С	\$30,000	\$60,000

The following clauses are proposed to be reviewable decisions: 2.10.2A, 2.34.7A, 2.34.7A(c), 2.34.7C, 7A.1.8(iii) and the existing reviewable decision in 1o 2.10.24 r7.68,

# Impact on Market Objective (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 new balancing and LFAS market proposal will enable more facilities to be made available for balancing and LFAS, reducing overall dispatch costs and enhancing system flexibility and security.

The balancing and LFAS market proposal preserves System Management's rights and obligations in relation to system security, including intervention if necessary to avoid the system entering a high risk state.

The new confidentiality provisions will improve the effectiveness of the operation of the balancing, LFAS and STEM markets by providing greater information to Market Participants upon which they can prepare bids, for example, than would otherwise be the case.

# Impact on Market Objective (b)

to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;

The balancing and LFAS market proposal will enable IPPs to compete with Verve Energy in the balancing and LFAS markets.

The balancing and LFAS market proposal is likely to make the overall market more attractive to new entrants through:

More opportunity to participate in balancing and LFAS, without financial disadvantage if dispatched out of merit (for any reason).

Increased ability to manage exposures to balancing and potentially inefficient STEM/Resource Plan outcomes.

The balancing and LFAS market proposal and new confidentiality provisions should also likely make the overall market more attractive to new entrants through increased transparency and availability of market information.

By more accurately signalling the need for and value of balancing, the proposal should promote efficient investment (e.g. in relation to the need for and value of flexibility).

# Impact on Market Objective (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 balancing and LFAS market proposal and new confidentiality arrangements will create a more level playing field for all generation options and technologies by more clearly signalling the value and cost of balancing and LFAS and system flexibility requirements.

While demand side management technologies will not be able to bid into the market (at least in its initial phase) given the desire to minimise the complexity of the initial balancing market arrangements, demand-side responses will be able to influence balancing quantities and prices.

#### Impact on Market Objective (d)

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

By increasing transparency of information and competition between Market Generators in the balancing and LFAS markets, the balancing and LFAS market proposal and new confidentiality arrangements are likely to drive down balancing and LFAS costs in the short to medium term.

In the longer term, clean cost reflective prices should help to minimise overall system costs by encouraging participants to factor the value of flexibility and/or their actual cost impacts into their investment decisions.

#### Impact on Market Objective (e)

to encourage the taking of measures to manage the amount of electricity used and when it is used.

The balancing and LFAS market proposal and new confidentiality arrangements may indirectly assist this Market Objective. Providing regular market price forecasts to market customers may facilitate more active demand side response. To the extent this occurs, more cost reflective balancing prices will lead to more efficient trade-offs.

# 5. Provide any identifiable costs and benefits of the change:

The IMO commissioned the Sapere Research Group (Sapere) to undertake an independent study of the likely costs and benefits of the balancing market proposal earlier this year based on estimates at that time. The study, led by Kieran Murray, quantified a small number of direct benefits of the proposal and compared these benefits with the estimated costs of implementing and operating the proposed arrangements. Estimates were based on optimistic, medium and pessimistic scenarios and were tested for sensitivity to variations in key assumptions. Personnel and systems cost estimates, establishment and ongoing, for all