

Agenda

Meeting Title:	Market Advisory Committee
Meeting No:	2017-01
Date:	Monday 1 May 2017
Time:	1:00 pm – 4:00 pm
Location:	Training Room No. 2, Albert Facey House 469 Wellington Street, Perth

Item	Subject	Responsibility	Duration
1	Welcome	Chair	5 min
2	Meeting Apologies/Attendance	Chair	5 min
3	Actions Arising	Chair	5 min
4	MAC Administration Update	Chair	30 min
5	Market Rules		
	a) Overview of Rule Change Proposals	Laura Koziol	10 min
	b) RC_2017_02 Implementation of 30-Minute Balancing Gate Closure <ul style="list-style-type: none"> • Presentation • Discussion 	Perth Energy/ Jenny Laidlaw	45 min
6	Discussion Paper - Role of Working Groups in the Procedure Change Process	Jenny Laidlaw	45 min
7	Electricity Market Review Update	Public Utilities Office	5 min
8	General Business	Chair	20 min
Next Meeting: TBC			

Agenda Item 3: MAC Action Items

Shaded	Shaded action items are actions that have been completed since the last MAC meeting.
Unshaded	Unshaded action items are still being progressed.
Missing	Action items missing in sequence have been completed from previous meetings and subsequently removed from log.

Item	Action	Responsibility	Meeting arising	Status/progress
3/2016	AEMO to provide an overview of its stakeholder engagement process at the next MAC meeting.	AEMO	May 2016	Closed

Agenda Item 4: MAC Administration Update

1. Membership Changes

The following changes to the membership of the Market Advisory Committee (MAC) have occurred since its last meeting on 29 August 2016.

Outgoing:

Name	Representing in MAC
Kylie O’Keeffe	Chair
Andrew Stevens	Market Generators
Matthew Cronin	Network Operator
Ray Challen	Small Use Consumers appointed by the Minister
Simon Middleton	Observer appointed by the Minister
Elizabeth Walters	Economic Regulation Authority (observer)

Incoming:

Name	Representing in MAC
Rajat Sarawat	Chair
Margaret Pyrchla	Network Operator
Matthew Martin	Small Use Consumers appointed by the Minister
Sara O’Connor	Economic Regulation Authority (observer)

2. MAC Constitution and Appointment Guidelines

On 10 April 2017 the Rule Change Panel published an invitation for submissions on proposed amendments to the MAC Constitution and Appointment Guidelines. The purpose of the amendments is to reflect the changes to the Market Rules that commenced on 26 November 2016.

The submission period closes at 5:00 pm on Thursday 27 April. It is expected that the Rule Change Panel will publish its final report and the amended MAC Constitution and Appointment Guidelines by 19 May 2017.

A more detailed review of the Constitution and Appointment Guidelines will be undertaken with the assistance of MAC members later this year.

3. 2017 Review of MAC Composition

The 2017 Review of the composition of the MAC will begin following the completion of the current review of the MAC Constitution and Appointment Guidelines. At this stage it is proposed that a call for nominations will be published in the week commencing 22 May 2017, with the aim of publishing the Rule Change Panel's decision on appointments by the end of July 2017.

4. 2017 Meeting Schedule

The proposed meeting schedule for the remainder of 2017 is provided in the table below.

Meeting No	Meeting Date
2017-01	Monday 1 May 2017
2017-02	Wednesday 31 May 2017 or 14 June 2017
2017-03	Wednesday 12 July 2017
2017-04	Wednesday 16 August 2017
2017-05	Wednesday 13 September 2017
2017-06	Wednesday 11 October 2017
2017-07	Wednesday 8 November 2017
2017-08	Wednesday 13 December 2017

Generally meetings are proposed to be held on the second Wednesday of each month, unless there are insufficient items on the agenda to warrant holding the meeting. However, the date of the next meeting (31 May 2017 or 14 June 2017) is dependent on whether members have issues or proposals that they would prefer to discuss with the MAC on the earlier date.

5. Recommendations

It is recommended that the MAC:

- notes the update on MAC administration matters; and
- provide a recommendation on the date of the next MAC meeting.

Agenda Item 5a: Overview of Rule Change Proposals

On 26 November 2016 certain responsibilities of the IMO under the Wholesale Electricity Market Rules (Market Rules) were transferred to the newly created Rule Change Panel. These included the rule making function, which commenced at 3 April 2017.

Rule Change Proposals submitted to the Rule Change Panel

Since 3 April 2017 two Rule Change Proposals have been submitted into the formal Rule Change Process. The Rule Change Panel will process these Rule Change Proposals in accordance with the process and timeframes set out in the Market Rules.

Rule Change Proposals initiated by the IMO

There are currently 10 open Rule Change Proposals that were initiated by the IMO under the Standard Rule Change Process. Since May 2015, the IMO has extended the normal timeframes for these Rule Change Proposals under clause 2.5.10 of the Market Rules to allow for the establishment of the Rule Change Panel as per the Minister's request¹. The IMO's most recent extension of the timeframes expired on 30 December 2016, which was after the IMO lost its rule making functions on 26 November 2016 but before the Rule Change Panel's rule making functions commenced on 3 April 2017.

The transitional provisions of the Market Rules provide that:

- any Rule Change Proposal that was developed by or submitted to the IMO prior to 26 November 2016 is deemed to have been developed by or submitted to the Rule Change Panel (clause 1.18.3(a) of the Market Rules);
- all timelines for the publication of Draft Rule Change Reports and Final Rule Change Reports will be automatically extended for such a period as determined by the Rule Change Panel (clause 1.18.3(b) of the Market Rules); and
- the Rule Change Panel may determine the period of the extensions after the date of the expiry of the normal or previously extended timeframes (clause 1.18.3(b) of the Market Rules)

On 10 April 2017 the Rule Change Panel extended the timeframes for publication of the Draft Rule Change Reports and Final Rule Change Reports (as applicable) for the 10 open Rule Change Proposals initiated by the IMO until 29 December 2017. This extension will allow the Rule Change Panel to assess the reports against the recent changes to the Market Rules and the Government's further reform announcements.

However, notwithstanding this extension date the Rule Change Panel is committed to publishing these reports as soon as practicable.

¹ On 25 May 2015 the Minister requested that the IMO use its discretion under clause 2.5.10 of the Market Rules to defer the timeframes for the ten Rule Change Proposals until the Rule Change Panel would be established.

Formally submitted Rule Change Proposals (as at 21 April 2017)

Reference	Date submitted	Proponent	Title	Next Step	Date
Rule Change Proposals formally submitted and awaiting a decision on their progression					
RC_2017_01	20/04/2017	Public Utilities Office (PUO)	Reserve Capacity Mechanism - Manifest Errors 2017	Decision whether to progress Rule Change Proposal	28/04/2017
Standard Rule Change Proposals with first submission period open					
RC_2017_02	04/04/2017	Perth Energy	Implementation of 30-Minute Balancing Gate Closure	Submissions close	29/05/2017
Standard Rule Change Proposals with first submission period closed					
RC_2015_03	27/03/2015	IMO	Formalisation of the Process for Maintenance Requests	Publication of Draft Rule Change Report	29/12/2017
RC_2015_01	03/03/2015	IMO	Removal of Market Operation Market Procedures	Publication of Draft Rule Change Report	29/12/2017
RC_2014_09	13/03/2015	IMO	Managing Market Information	Publication of Draft Rule Change Report	29/12/2017
RC_2014_06	28/01/2015	IMO	Removal of Resource Plans and Dispatchable Loads	Publication of Draft Rule Change Report	29/12/2017
RC_2014_05	02/12/2014	IMO	Reduced Frequency of the Review of the Energy Price Limits and the Maximum Reserve Capacity Price	Publication of Draft Rule Change Report	29/12/2017
RC_2014_03	27/01/2014	IMO	Administrative Improvements to the Outage Process	Publication of Draft Rule Change Report	29/12/2017
RC_2013_15	24/12/2013	IMO	Outage Planning Phase 2 – Outage Process Refinements	Publication of Draft Rule Change Report	29/12/2017

Reference	Date submitted	Proponent	Title	Next Step	Date
Standard Rule Change Proposals with second submission period closed					
RC_2014_10	13/01/2015	IMO	Provision of Network Information to System Management	Publication of Final Rule Change Report	29/12/2017
RC_2014_07	22/12/2014	IMO	Omnibus Rule Change	Publication of Final Rule Change Report	29/12/2017
RC_2013_21	10/01/2014	IMO	Limit to Early Entry Capacity Payments	Publication of Final Rule Change Report	29/12/2017

Agenda Item 5b: Implementation of 30-Minute Balancing Gate Closure (RC_2017_02)

1. Background

On 4 April 2017 Perth Energy submitted a Rule Change Proposal titled “Implementation of 30-Minute Balancing Gate Closure” (RC_2017_02). The Rule Change Proposal seeks to reduce the length of the Balancing Gate Closure period to no more than 30 minutes.

The Rule Change Panel has decided to progress this Rule Change Proposal using the Standard Rule Change Process. A copy of the Rule Change Proposal is provided in Appendix A of this paper.

2. MAC Presentation and Discussion

Perth Energy will give a brief presentation on the Rule Change Proposal at this meeting. In addition, MAC members are invited to provide their preliminary views on the following questions.

- What are the potential benefits of reducing gate closure to 30 minutes?
- What are the potential costs and risks of reducing gate closure to 30 minutes?
- The proposal allows for AEMO to reduce Balancing Gate Closure to a period less than 30 minutes. What additional changes (e.g. to systems, processes or the Market Rules) might be needed to support a sub-30 minute gate closure?
- The proposal refers to the Pre Rule Change Proposal: Improvements to the Energy Market (PRC_2014_01), which was developed by the IMO in early 2014. PRC_2014_01 also sought to reduce Balancing Gate Closure to 30 minutes. However, PRC_2014_01 additionally proposed:
 - replacing the 6-hour block-based gate closure for the LFAS Market with a rolling gate closure (2 hours for the Balancing Portfolio and 90 minutes for other Facilities); and
 - changing Balancing Market gate closure for the Balancing Portfolio to a rolling 60 minutes.

If Balancing Gate Closure was to be reduced to 30 minutes should any additional changes be made to the gate closure arrangements for the Balancing Portfolio and LFAS Market?

3. Recommendations

It is recommended that the MAC:

- discusses Perth Energy's Rule Change Proposal and supporting presentation;
- discusses the questions raised in section 2 above; and
- notes that the first submission period for the Rule Change Proposal closes at **5:00 pm on Monday 29 May 2017**.

Appendix A. RC_2017_02 Rule Change Proposal

Wholesale Electricity Market Rule Change Proposal

Rule Change Proposal ID: RC_2017_02
Date received: 4 April 2017

Change requested by:

Name:	Liz Aitken, General Manager Operations
Phone:	(08) 9420 0347
Email:	e.aitken@perthenergy.com.au
Organisation:	Perth Energy
Address:	Level 24, The Forrest Centre, 221 St Georges Terrace, Perth WA 6000
Date submitted:	4 April 2017
Urgency:	High
Rule Change Proposal title:	Implementation of 30-Minute Balancing Gate Closure
Market Rule(s) affected:	Clause 7A.1.16 of the Market Rules

Introduction

Clause 2.5.1 of the Wholesale Electricity Market (WEM) Rules (Market Rules) provides that any person may make a Rule Change Proposal by completing a Rule Change Proposal form that must be submitted to the Rule Change Panel.

This Rule Change Proposal can be sent to:

Email to: rcp.secretariat@rcpwa.com.au

Post to: Rule Change Panel
 Attn: Executive Officer
 C/o Economic Regulation Authority
 PO Box 8469
 PERTH BC WA 6849

The Rule Change Panel 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 change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the Wholesale Market Objectives.

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.

Details of the Proposed Rule Change

1. Describe the concern with the existing Market Rules that is to be addressed by the proposed rule change:

Summary of issue

Perth Energy proposes clause 7A.1.16 of the Market Rules be amended to change the Balancing Gate Closure from the current six-to-two-hour window, to no more than 30 minutes before the relevant Trading Interval.

Increased participation in the Wholesale Electricity Market (**WEM**), combined with growth in the WA energy sector, has led to more dynamic market conditions. As a result, Perth Energy considers the current two-hour Balancing Gate Closure, is no longer sufficient to maintain an efficient and equitable market, as load forecasts have been seen to adjust dramatically in the two hours between finalising Balancing Submissions and commencing the Trading Interval.

Accurately forecasting demand is a prerequisite for an economically efficient market, and effective price signals. Though Perth Energy recognises the market operator has made improvements in load forecast accuracy¹, the dynamism of the WEM means the load forecast can vary by more than 400 MW² in the space of two hours. Such variation results in inaccurate price signals, which can lead to a less responsive and competitive market.

Perth Energy understands work has been undertaken by the Australian Energy Market Operator (**AEMO**) to improve load forecast accuracy over the last few years, however, further improvement is likely to be a lengthy and expensive process. Moving the Balancing Gate Closure to 30 minutes before a Trading Interval, will provide Market Participants greater opportunity to respond to forecast changes and bid as accurately as possible. While shortening the time between gate closure and trading will not improve the forecast itself, it reduces the margin for error, and is a practical and inexpensive first step to improve the economic efficiency of the market.

It should be noted that shortening the Balancing Gate Closure was prioritised as part of the

¹ See Rule Change Proposal: Transparency of Outage Information (RC_2011_12).

² Monitoring of Trading Intervals by Perth Energy between 14 January 2017 and 16 March 2017 found the load forecast varied upwards by a maximum of +294 MW and downwards by a maximum of -428 MW.

Independent Market Operator (**IMO**)'s 2013 Market Rules Evolution Plan³, and received widespread support from Market Participants.

Further background to this proposed rule change is provided below.

Background and context

Under clause 7A.1.16 of the Market Rules, AEMO *must determine a point in time immediately before the commencement of a Trading Interval for the purpose of setting the Balancing Gate Closure*. Balancing Gate Closure is the point at which Market Participants are no longer permitted to update bids or offers submitted with respect to that Trading Interval, except on limited specified grounds⁴.

The Market Rules currently provide an upper and lower bound during which Balancing Gate Closure must occur. Clause 7A.1.16 of the Market Rules currently requires Balancing Gate Closure to be *no shorter than two hours and no longer than six hours before the commencement of a Trading Interval and be published on the Market Web Site by AEMO*⁵.

The two-to-six hour lower and upper bounds are a legacy of the transition from the Short Term Energy Market (**STEM**) and have been in place since the Balancing Market was introduced. The introduction of the Balancing Market in July 2012⁶ meant Market Participants and System Management (now AEMO) were moving from day-ahead trading under the STEM, to a much shorter bidding and dispatch process. At the time, System Management raised concerns that the reduced timelines may cause difficulties for system controllers, therefore it was considered prudent to have a transitional Balancing Gate Closure of six hours for the first six months of the new Balancing Market operation.

After a successful transition period, in December 2012 the Balancing Gate Closure was reduced to two hours. As a precaution, clause 7A.1.17 of the Market Rules was included in the Market Rules, which allows the market operator to change the Balancing Gate period:

AEMO may from time to time, change the point in time determined under clause 7A.1.16 by publishing the new point in time on the Market Web Site and specifying the date from which the new point in time is to take effect, which shall be no earlier than 2 months from the date of publication.

Clause 7A.1.17 was designed as a safeguard to allow the Balancing Gate period to increase should System Management or Market Participants experience insurmountable difficulties with a two-hour Balancing Gate Closure.

After more than four years of operation, Balancing Gate Closure remains at two hours before the relevant Trading Interval. Market Participants and System Management have demonstrated capability to operate with a small bidding window in a near real-time market. Therefore, it is reasonable to consider shortening the period of time between closure and trading further.

³ Issue 3 was the 'Transition to half hour Balancing Gate Closure'.

⁴ Including for example where the information provided within a Balancing Submission does not accurately reflect internal or external constraints, a reasonable expectation of the capability of a Facility, or the price, or where a Market Participant receives an Operating Instruction.

⁵ This information is currently published at: <http://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Participant-information/Current-participants/Balancing-market-participation>.

⁶ See the Rule Change Proposal: Competitive Balancing and Load Following Market (RC_2011_10).

Issue

The current Balancing Gate Closure arrangement means the information used by Market Participants to finalise Balancing Submissions is at least two hours old. Though two hours between gate closure and trading was appropriate during the formation of the Balancing Market, the market has become increasingly dynamic. In particular, the increased percentage of Non-Scheduled Generation and small-scale solar means that load has the ability to change significantly in real-time.

Perth Energy has observed increased volatility in load forecasts during this two hour window. For example, between 14 January 2017 and 16 March 2017⁷, in the two hours between Balancing Gate Closure and the commencement of the relevant Trading Interval:

- the load forecast decreased on average by 8MW over the period for which data was collected (2880 trading intervals) however there was an increase 49.4% of the time, and a decrease 50.5% of the time;
- decreased on average by 8 MW over the 2,880 Trading Intervals;
- at the maximum, the load forecast varied by +294 MW and -428 MW;
- where the forecast increased after Balancing Gate Closure, the increase was on average 56 MW, and was over +100 MW 8% of the time; and
- where the forecast decreased after Balancing Gate Closure, the decrease was on average 74 MW, and was over -100 MW 12% of the time.

Perth Energy also observed variance in price information over the same period. It found that in the two hours between gate closure and trading:

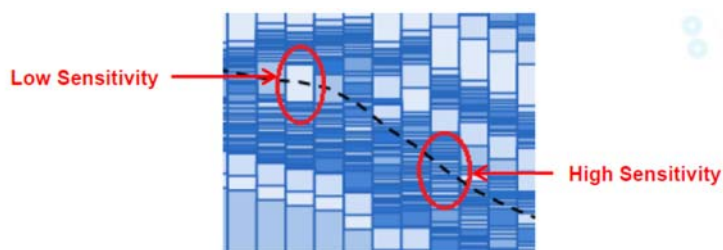
- the price forecast increased on average by \$1.81/MWh over the 2,880 Trading Intervals;
- at the maximum, the price forecast varied by +\$147.76/MWh and -\$107.26/MWh;
- where the forecast increased after Balancing Gate Closure, the increase was on average \$17.28/MWh or 29%, and 10% of the time was over 33%; and
- where the forecast decreased after Balancing Gate Closure, the decrease was on average \$12.39/MWh or -19%, and 5% of the time was over 33%.

These variances in price signal show the impact of load forecast accuracy on price signals, and ultimately the WEM overall.

The impact of the load forecast error on the price signal has increased significantly due to the recent heightened sensitivity in the Balancing Merit Order. Perth Energy notes that the frequency of large price-quantity pair blocks in the Balancing Merit Order has diminished, and has been replaced with several smaller blocks. This change increases the sensitivity to variation in the load forecast, which ultimately affects prices. Figure 1 illustrates recent changes in the Balancing Merit Order.

⁷ The data set does not include information missing from the Trading Intervals 12:00 on 2 March 2017 to 11:30 on 3 March 2017.

Figure 1: Example of changes in the sensitivity of the Balancing Merit Order



Accurate price signals are crucial for an effective market. They increase competition, which reduces overall prices over time and improves market efficiency. This is because where a Market Participant expects the Balancing Price to be close to the price at which it is prepared to run a Facility, it is likely to make a slightly lower offer to improve the chances of being dispatched.

The more confident a Market Participant is in the load forecast, the more confident it will be in predicting the Balancing Price, and the more competitive it will become. The greater competition among Market Participants for dispatch, the lower prices become, and the lower the expected Balancing Price will be, and so on. The current two hour gate closure means that Market Participants are unable to compete by responding to price signals, and this ultimately increases the cost of electricity for consumers.

Inaccurate price signals result in inefficient market outcomes. Consistently inaccurate load forecasts that flow through to a highly sensitive Balancing Merit Order result in large movements in Balancing Price outcomes. The total dollar impact to consumers of the inability for generators to respond to price signals for the 60 day period from 14 January to 16 March⁸ was \$8,901,595⁹. Extrapolated over 12 months this unmitigated market risk equates to a cost of \$53 million.

Proposed change

The nearer to the relevant Trading Interval, the lower the likelihood that load forecasts will vary, and the more likely that Balancing Price outcomes will be accurate. Perth Energy therefore proposes to amend clause 7A.1.16 of the Market Rules to change the existing transitional Balancing Gate Closure:

- by amending the upper bound of six hours to 30 minutes prior to the relevant Trading Interval; and
- removing the lower bound altogether.

Perth Energy recommends the upper bound of 30 minutes be hard-coded into the Market Rules. Removing the lower bound will allow the Balancing Gate Closure to be further shortened in the future as forecast accuracy and technical capabilities improve. Note Perth Energy proposes clause 7A.1.17 of the Market Rules be retained in its current form.

Enabling Market Participants to respond to load forecast volatility closer to the relevant Trading Interval will improve their ability to manage participation and risk in the physical markets, and thereby improve overall market efficiency.

⁸ The data set does not include information missing from the Trading Intervals 12:00 on 2 March 2017 to 11:30 on 3 March 2017.

⁹ $((\text{Final hh load} * \text{price variance}) + (\text{load variance} * \text{final hh price}))/2$

2. Explain the reason for the degree of urgency:

In 2013, shortening Balancing Gate Closure was prioritised as part of the Market Rules Evolution Plan¹⁰ and included in a broader package of improvements to the energy market. There was general support from Market Participants for this proposal, and the move to a 30-minute Balancing Gate Closure was proposed to be progressed as part of the pre Rule Change Proposal: *Enhancements to the Energy and LFAS Markets (PRC_2014_01)*.

In March 2015, the State Government's Electricity Market Review (**EMR**) moved into an implementation phase. The EMR included plans to remove Balancing Gate Closure completely and allow Market Participants to bid up to the beginning of a Trading Interval. Shortened gate closure was therefore removed from the package of changes included in PRC_2014_01 which ultimately became *Removal of Resource Plans and Dispatchable Loads (RC_2014_06)*.

A recent change of State Government means the EMR has halted and there is uncertainty around how and when it will progress.

Perth Energy supports the ultimate objective to remove Balancing Gate Closure entirely, however it recognises this will likely be a long process that would require significant consultation and investment in systems and processes. Through consultation with AEMO supported shortened gate closure, noting:

EMR reforms to energy and ancillary service markets would have delivered shorter gate closure (or potentially eliminate gate closure altogether) as part of a larger suite of reforms. Ultimately in AEMO's view, the full reform remains the preferred solution for the WEM.

Given the uncertainty around the direction of the EMR, coupled with the overwhelming support for this relatively inexpensive step and significant benefits of reducing Balancing Gate Closure to 30 minutes via a rule change, Perth Energy considers it prudent to proceed immediately.

3. Provide any proposed specific changes to particular Market Rules: (for clarity, please use the current wording of the rules and place a ~~strike through~~ where words are deleted and underline words added)

7A.1.16. With effect on and from the Trading Interval commencing at 8:00 AM on the Balancing Market Commencement Day, AEMO must determine a point in time immediately before the commencement of a Trading Interval for the purpose of setting the Balancing Gate Closure. -The point in time must be ~~no shorter than two hours and~~ no longer than ~~six hours~~ 30 minutes before the commencement of a Trading Interval and must be published on the Market Web Site.

Perth Energy notes that this clause is not a Protected Provision, Reviewable Decision or civil penalty provision under the WEM Regulations.

A number of Market Procedures may also need to be revised to ensure consistency with this proposed amendment.

¹⁰ Issue 3 was the 'Transition to half hour Balancing Gate Closure'.

4. Describe how the proposed rule change would allow the Market Rules to better address the Wholesale Market Objectives:

Perth Energy considers the proposed change will allow the Market Rules to better achieve Wholesale Market Objectives (a), (b), (c) and (d).

Wholesale Market Objective (a)

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

Shortening the Balancing Gate Closure will improve the efficiency and effectiveness of the WEM by enabling Market Participants greater ability to respond to load forecast changes and base Balancing Submissions on more reliable information. Market Participants will be able to submit cost-reflective bids in a timely manner, and better manage market exposure risks.

It should be noted that the proposed change will not be to the detriment of safe and reliable production or supply of electricity, and will likely reduce ancillary service costs due to decreased deviations between forecasts and loads. The dispatch of all Facilities will remain subject to System Management intervention for system security purposes.

Perth Energy considers this rule change will promote efficiency without compromising the safety or reliability of the system.

Wholesale Market Objective (b)

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

The proposed change will enable more active participation for those Market Participants wanting to respond to price signals in the WEM, and ultimately increase competition and reduce prices. Perth Energy notes however, that should any Market Participant not want to or be unable to respond in the shorter timeframe, there is no obligation to do so.

Greater transparency of information closer to the relevant Trading Interval will provide greater opportunities for participation for generators, in particular for those outside of the Synergy portfolio, which would otherwise be dispatched by System Management in real-time in their place. Perth Energy therefore considers that this rule change will encourage further competition amongst existing generators and encourage new entrants in the WEM.

Wholesale Market Objective (c)

- (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 longer the gap between Balancing Gate Closure and the relevant Trading Interval, the greater the likelihood that larger more traditional generation Facilities would be dispatched (e.g coal-fired generation).

Balancing Gate Closure occurring two hours prior to the relevant Trading Interval effectively reduces the likelihood of Facilities able to respond in short timeframes being dispatched to the benefit of larger, more traditional Facilities.

A 30-minute Balancing Gate Closure would require a greater proportion of smaller, more responsive Facilities (such as peaking generation) to be dispatched, therefore increasing competition and reducing discrimination against peaking generation.

Wholesale Market Objective (d)

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

Improved price signals, coupled with an ability to respond will increase participation and therefore competition in the WEM. This in turn will promote a more efficient generation mix, and drive lower prices to end-use customers.

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

Benefits

The proposed change will improve the efficiency and effectiveness of the WEM by enabling Market Participants to respond to new and more accurate information.

A 30-minute Balancing Gate Closure will provide Market Participants with a greater ability to respond to load forecast changes, basing Balancing Submissions on more reliable information. This means Market Participants will be able to prepare more competitive Balancing Submissions than might otherwise be the case, and to better understand / manage risks, ultimately driving down costs for end users.

Perth Energy assessed the impact of load forecast and price variances between Balancing Gate Closure and the Trading Interval from January to March 2017. Perth Energy calculated \$3.16 million was at risk based on its Facility running at full capacity. This included:

- down-side price risk of \$1.29 million, where the load was over-forecast and Perth Energy was at risk of running at below cost; and
- potential foregone revenue of \$1.87 million, where the load was under-forecast and Perth Energy could have bid in to run economically but the price was not reflective.

In addition the total dollar impact to consumers of the inability for generators to respond to price signals for the 60 day period from 14 January to 16 March was \$8,901,595. Extrapolated over 12 months this unmitigated market risk equates to a cost of \$53 million.

Perth Energy considers this risk could have been minimized or avoided if the Balancing Gate Closure was brought closer to the relevant Trading Interval. Perth Energy believes all Market Participants would benefit from the Balancing Gate Closure change.

Market Participants will also benefit from a reduced risk of non-compliance following Balancing Gate Closure, as the window will be shorter.

Implementation costs

In March 2017 during the preparation of this Rule Change Proposal, Perth Energy engaged with AEMO and the ERA regarding the impact of this proposal on their respective systems and processes.

Clause 7A.2.10 of the Market Rules requires Market Participants to update a Balancing Submission after Balancing Gate Closure as soon as it becomes aware that any information contained within it is inaccurate. This means that the market and dispatch systems and processes that AEMO uses must already be able to accommodate Balancing Submissions after Balancing Gate Closure.

Perth Energy considers that this existing functionality should make any changes to market systems minimal. However, AEMO was unable to provide Perth Energy with an indicative cost of the proposed change in the timeframe but stated it will be able to do so during the consultation phase of the rule change process.

In previous discussions, System Management (now AEMO) indicated that the shortened Balancing Gate Closure may increase the workload of its system operators, as they will need to understand and process dispatch instructions in a shortened timeframe. However, a change in Balancing Gate Closure to 30 minutes will not require any additional forecasting from a system operations perspective as AEMO already produces forecasts every half hour.

As there is an existing ability, and requirement in some circumstances for Market Participants to amend submissions after Balancing Gate Closure, Perth Energy understands that Market Participants are unlikely to incur any additional costs as a result of the proposed change.

Perth Energy notes that the shortening of Balancing Gate Closure will increase the risk that System Management (AEMO) will need to use information from a previous Trading Interval for dispatch should a Balancing Merit Order be unavailable. However, Perth Energy considers AEMO has processes and systems already in place that will minimise the impact of this risk.

The proposed move to 30-minute Balancing Gate Closure will result in a change in compliance monitoring and reporting for the ERA. However, the ERA advised that it did not expect to incur any additional costs as a result.

Agenda Item 6: Discussion Paper - Role of Working Groups in the Procedure Change Process

1. Background

Between 30 November 2015 and 26 November 2016 the Minister for Energy made several amendments to Wholesale Electricity Market (WEM) Rules (Market Rules) that modified the governance arrangements for WEM Market Procedures.

Prior to 30 November 2015 System Management was responsible for development and maintenance of the Power System Operation Procedures, while the IMO was responsible for the development and maintenance of all other Market Procedures. The IMO was also responsible for the final approval of changes to all Market Procedures, including Power System Operation Procedures.

Under the new arrangements there is no longer a single, central approving body for Procedure Change Proposals. Instead, for each Market Procedure the Market Rules identify a single responsible party (“responsible procedure administrator”), which may be AEMO (including in its capacity as System Management), the Economic Regulation Authority or the Rule Change Panel¹. Each responsible procedure administrator is responsible for managing the development and maintenance of its assigned Market Procedures.

Currently the Rule Change Panel and the Economic Regulation Authority are each responsible for two Market Procedures:

- the Economic Regulation Authority is responsible, under clauses 2.15.1 and 4.16.3 of the Market Rules, for the Monitoring Protocol and the Market Procedure: Maximum Reserve Capacity Price; and
- the Rule Change Panel is responsible, under clauses 1.6.1 and 2.9.5 of the Market Rules, for the Market Procedure: Notices and Communications (Rule Change Panel) and the Market Procedure: Procedure Administration (“Administration Procedure”).

AEMO is responsible for all other Market Procedures.

The Market Advisory Committee (MAC) has retained its role as a provider of advice to responsible procedure administrators regarding Procedure Change Proposals.

¹ The Market Rules also contemplate the IMO acting as a responsible procedure administrator, but at present no Market Procedures are assigned to the IMO and none are expected to be in the future.

2. Procedure Change Working Groups

At its first meeting, held on 28 February 2007, the MAC established two permanent Working Groups:

- the IMO Procedure Change and Development Working Group (IMOPWG), whose scope of work included consideration, assessment and development of changes to Market Procedures assigned to the IMO under the Market Rules; and
- the System Management Procedure Change and Development Working Group (SMPWG), whose scope of work included consideration, assessment and development of changes to Market Procedures assigned to System Management (i.e. the Power System Operation Procedures).

The Terms of Reference for the two Working Groups are provided in Appendix A of this paper.

In addition to the two permanent Working Groups, the MAC is also able to form Working Groups to provide it with advice on changes to a specific Market Procedure. An example of such a Working Group is the Maximum Reserve Capacity Working Group (MRCPWG). The MRCPWG, which operated between May 2010 and June 2011, was established to assist with the IMO's five-yearly review of the Market Procedure: Maximum Reserve Capacity Price.

3. Administration Procedure

The role of Working Groups in the Procedure Change Process is set out in the Administration Procedure. Under the Administration Procedure:

- a responsible procedure administrator may convene an existing active Working Group to discuss a Procedure Change Proposal either before submitting it into the Procedure Change Process or else during the formal process (step 2.2.5);
- prior to the submission of a Procedure Change Proposal, the responsible procedure administrator must notify the members of the appropriate Working Group as to whether any proposed amendments to the Market Procedure require discussion by the Working Group and the reasons why (step 2.2.6);
- once it has published a Procedure Change Proposal, the responsible procedure administrator must notify all members of the MAC and advise them whether it considers that the MAC should be convened in relation to the Procedure Change Proposal, giving reasons why (step 2.5.1) – typically the responsible procedure administrator will consider the MAC does not need to be convened because the proposal has already been reviewed by the relevant Working Group; and
- the Rule Change Panel must convene a meeting of the MAC, prior to the close of submissions, in relation to a Procedure Change Proposal if:
 - the responsible procedure administrator considers that advice on the proposal is required from the MAC; or

- two or more members of the MAC have written to the Rule Change Panel indicating they consider that advice on the proposal is required from the MAC (step 2.5.2 and clause 2.10.9 of the Market Rules).

4. Questions for the MAC

MAC members are invited to provide their response to the following questions.

- Does the MAC want to continue the use of MAC Working Groups to assist it in providing advice to procedure administrators on Procedure Change Proposals?
- If so:
 - what permanent Working Groups are required, e.g.
 - are separate Working Groups preferable for different procedure administrators;
 - should the same Working Group consider both Power System Operation Procedures and other AEMO Market Procedures or should different Working Groups be used; and
 - are permanent Working Groups warranted for the Market Procedures administered by the Rule Change Panel and the Economic Regulation Authority?
 - what changes if any are required to the provisions set out in the Administration Procedure around the use of Working Groups?
 - what administration and governance arrangements should apply to these Working Groups, e.g.
 - how should the Chair and members be selected;
 - who should provide secretariat services to the Working Groups;
 - who should be able to refer an issue to a Working Group for consideration (currently this is the MAC and the IMO);
 - under what circumstances should meetings of the Working Group be convened; and
 - how should each Working Group be required to report back to the MAC?

5. Recommendations

It is recommended that the MAC:

- discusses the questions raised in section 4 above;
- decides whether the IMOPWG and SMPWG should be disbanded, retained in their current form, modified or replaced; and
- notes that the Rule Change Panel intends to prepare the following draft documents for consideration by the MAC:

- new or amended (as appropriate) Terms of Reference for any permanent Working Groups required by the MAC to support its role in providing advice on Procedure Change Proposals; and
- a Procedure Change Proposal for amendments to the Administration Procedure, to reflect any agreed changes to the use of MAC Working Groups in the Procedure Change Process.

Appendix A. IMOPWG and SMPWG Terms of Reference

IMO Procedure Change and Development Working Group Terms of Reference

1. SCOPE

The Working Group's scope of work includes consideration, assessment and development of changes to IMO Market Procedures which the Market Rules require the IMO to develop. A Report on each Procedure Change proposed by the Working Group will be provided to MAC which demonstrates that the proposed change is consistent with the Wholesale Market Objectives and the Market Rules.

2. TERMS OF REFERENCE

- Members of the Working Group are appointed and substituted by MAC.
- The members of the Working Group are:

Member	Representation
Kate Ryan	Chair - IMO
Fiona Wiseman	Industry Representative, Alinta Energy
John Nguyen	Industry Representative, Perth Energy
Steve Gould	Industry Representative, Community Electricity
Adrian Theseira	System Management Representative
Brad Huppatz	Synergy Representative
Erin Stone	IMO Representative

- An issue can be referred to the Working Group for consideration by the MAC or the IMO. Generally, issues referred to the Working Group will relate to proposed procedure changes.
- The Working Group will be convened by the Chair upon request from the MAC Chair, or as required to complete its Scope of Work within the required timeframes.
- The Working Group will meet as required to provide the MAC and the IMO with a detailed analysis and advice regarding the issue referred to them.
- The Working Group will consider and develop, where appropriate, procedure changes within the timeframes set by the Chair with respect to each proposed procedure change.

- Procedure changes proposed by the Working Group must be consistent with the Wholesale Market Objectives and the Market Rules.
- Members are expected to attend as many Working Group meetings as practicable.
- The MAC may review, amend and extend these terms of reference, as necessary.

System Management Procedure Change and Development Working Group - Terms of Reference

1. SCOPE

The Working Group's scope of work includes consideration; assessment and development of changes to System Management Market Procedures which the Market Rules require System Management to develop. A Report on each Procedure Change proposed by the Working Group will be provided to MAC which demonstrates that the proposed change is consistent with the Wholesale Market Objectives and the Market Rules.

2. TERMS OF REFERENCE

- Members of the Working Group are appointed and substituted by MAC.
- The members of the Working Group are:

Member	Representation
Mike Davidson	Chair, System Management
Kate Ryan	IMO Representative
John Rhodes	Synergy Representative
Nick Walker	Verve Energy Representative
Adrian Theseira	System Management Representative
Fiona Edmonds	Industry Representative, Alinta Energy
Tremayne Pirnie	Industry Representative, Griffin Group
John Nguyen	Industry Representative, Perth Energy
Rene Kuypers	Industry Representative, Infigen Energy
Steve Gould	Industry Representative, Community Electricity
Stewart Richardson	Industry Representative, ERM Power

- An issue can be referred to the Working Group for consideration by MAC or the IMO. Generally, issues referred to the Working Group will relate to proposed Procedure Changes.

- The Working Group will meet as required to provide MAC and the IMO with a detailed analysis and advice regarding the issue referred to them.
- The Working Group will consider and develop, where appropriate, Procedure changes within the timeframes set by the Chair with respect to each proposed Procedure change.
- Procedure Changes proposed by the Working Group must be consistent with the Wholesale Market Objectives and the Market Rules
- Members are expected to attend as many Working Group meetings as practicable.
- MAC may review, amend and extend these terms of reference, as necessary.