

Meeting Agenda

Meeting Title: Market Advisory Committee

Date: Tuesday 8 June 2021

Time: 9:30 AM – 11:00 AM

Location: Online meeting

Persons who would like to attend the online MAC meeting are asked to register with RCP Support (Support@rcpwa.com.au) by

COB on Friday 4 June 2021.

RCP Support will then send an invitation to all registered attendees prior to the MAC meeting with a link to allow attendees to log into

the meeting.

Item	Item	Responsibility	Duration
1	Welcome	Chair	2 min
2	Meeting Apologies/Attendance	Chair	3 min
3	Minutes of Meeting 2021_04_07	Chair	5 min
4	Action Items	Chair	5 min
5	MAC WEM Rules Issues List	Chair	5 min
6	Update on WA Government Reforms (no paper)	ETIU	10 min
7	AEMO Procedure Change Working Group	AEMO	5 min
8	Rule Changes		
	(a) Overview of Rule Change Proposals	Chair	20 min
9	Update on the Transition of Rule Administration to the Coordinator of Energy (no paper)	ERA	30 min
10	General Business	Chair	5 min

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Next meeting: The next scheduled MAC meeting, as agreed by the MAC, is

20 July 2021.

However, the MAC will transition to its new arrangements in July 2021 and the Minister will shortly appoint a new Chair of the MAC. The new Chair of the MAC will contact MAC members to set the schedule for

future MAC meetings.

Please note, this meeting will be recorded.



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Minutes

Meeting Title:	Market Advisory Committee (MAC)
Date:	27 April 2021
Time:	9:30 AM – 11:10 AM
Location:	Online via Microsoft Teams

Attendees	Class	Comment
Stephen Eliot	Chair	
Matthew Martin	Small-Use Consumer Representative	
Mark Katsikandarakis	Australian Energy Market Operator (AEMO)	Proxy for Martin Maticka
Dean Sharafi	AEMO	
Sara O'Connor	Economic Regulation Authority (ERA) Observer	
Dora Guzeleva	Minister's Appointee – Observer	Proxy for Kate Ryan from 9:55 AM
Jo-Anne Chan	Synergy	
Jacinda Papps	Market Generator	
Wendy Ng	Market Generator	
Daniel Kurz	Market Generator	
Tom Frood	Market Generator	From 10:00 AM
Patrick Peake	Market Customer	
Geoff Gaston	Market Customer	
Timothy Edwards	Market Customer	
Peter Huxtable	Contestable Customer	
Zahra Jabiri	Network Operator	To 11:00 AM

Also in Attendance	From	Comment
Richard Cheng	ERA	Presenter
Jai Thomas	Energy Policy WA (EPWA)	Presenter
Jenny Laidlaw	RCP Support	Minutes
Adnan Hayat	RCP Support	Observer

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Also in Attendance	From	Comment
Laura Koziol	RCP Support	Observer
Sandra Ng Wing Lit	RCP Support	Observer
Natalie Robins	RCP Support	Observer
Vijeshni Ashna Nand	RCP Support	Observer
Matt Shahnazari	ERA	Observer
Erdem Oz	ERA	Observer
Sandy Ng	AEMO	Observer
Grace Liu	AEMO	Observer
Ian Porter	Sustainable Energy Now (SEN)	Observer
Noel Schubert	Independent	Observer
Erin Stone	Point Global	Observer
Oscar Carlberg	Alinta Energy	Observer
Dimitri Lorenzo	Bluewaters Power	Observer
Paul Arias	Bluewaters Power	Observer, From 9:50 AM to 10:20 AM

Apologies	From	Comment
Kate Ryan	Minister's Appointee – Observer	
Martin Maticka	AEMO	

Item	Subject	Action
1	Welcome	
	The Chair opened the meeting at 9:30 AM and welcomed members and observers to the 27 April 2021 MAC meeting.	
2	Meeting Apologies/Attendance	
	The Chair noted the attendance as listed above.	

3 Minutes of Meeting 2021_02_02

Draft minutes of the MAC meeting held on 2 February 2021 were circulated on 2 March 2021.

The MAC accepted the minutes as a true and accurate record of the meeting.

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Item	Subject	Action
	Action: RCP Support to publish the minutes of the 2 February 2021 MAC meeting on the Rule Change Panel's (Panel) website as final.	RCP Support
4	Action Items	
	The closed action items were taken as read.	
	The Chair noted that action item 3/2021 would be discussed under agenda item 5.	

5 MAC Market Rules Issues List (Issues List)

The Chair noted that RCP Support had not yet completed its intended review of the Issues List due to competing priorities. RCP Support would try to complete the review before the next MAC meeting, but otherwise the review would be carried out by the new MAC following the transfer of responsibilities for rule administration to the Coordinator.

The Chair noted that, at the last MAC meeting, Mr Ian Porter raised an issue about the consideration of emissions costs. After reviewing the minutes of that meeting, the Chair was uncertain whether Mr Porter's issue related to:

- whether the WEM Rules should actively promote renewable energy (which the Chair considered was a matter beyond the scope of the MAC that should be raised directly with EPWA); or
- how emissions costs should be considered within the existing rule change process.

Mr Porter agreed that the purpose of the rule change process was not to actively promote particular technologies in a market situation. Mr Porter clarified that his concern related to the current lack of detailed information about emission levels in the Wholesale Electricity Market (**WEM**).

Mr Porter noted that EPWA had included many very detailed assumptions in its modelling for the first Whole of System Plan (WOSP). Given recent international developments, the introduction of a carbon pricing mechanism in Australia seemed more likely, which could lead to stranded assets in the WEM. Mr Porter suggested that a knowledge of WEM emissions on a daily and real-time basis would be very useful to enable the upcoming transition, to ensure the lowest price of power in the State considering the possible impact of stranded assets.

Mr Porter suggested that methods to measure the exact emissions of a Facility from its output level could be established, and then applied to the actual output of each Facility.

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Mr Dean Sharafi considered that the Panel, or in future the Coordinator, would need a clear Government direction to actively promote emissions reduction through their rule change decisions.

Mr Porter agreed to the Chair's request that he prepare a description of the issue for inclusion in the Issues List.

Mr Patrick Peake did not consider that the MAC should consider the issue without a direction from Government. Mr Peake questioned how the information that was proposed to be collected would actually affect future rule change decisions. The Chair clarified that the intent of his request was to allow the MAC to understand the issue and advise whether it needed to be addressed by the Panel/Coordinator going forward.

Mr Porter reiterated his view that emissions assumptions would be an important input to future WOSPs. The Chair noted that the MAC's role was to advise the Panel/Coordinator on rule changes rather than WOSP assumptions.

Mr Noel Schubert considered that the issue was sufficiently important to include it on the Issues List to ensure it was considered further.

Mr Jai Thomas supported the MAC considering the issue and potentially including it on the Issues List. However, Mr Thomas considered that this was a "bottom up" approach, and the treatment of emissions was really a high-level issue that involved the Wholesale Market Objectives and would therefore require some direction from Government. Mr Thomas noted that the Government had directed EPWA to model emissions in the next WOSP as an outworking of the State's climate policy; and expected that over time further clarity would emerge about the Government's intentions regarding emissions and the Wholesale Market Objectives.

Mr Daniel Kurz asked whether Mr Porter's issue was that there was no real-time visibility of the carbon intensity of the WEM, which impacted on the ability to make assumptions on costs. Mr Kurz noted that Bluewaters Power had provided EPWA with generator carbon intensity details for use in the WOSP modelling, and that carbon intensity, and therefore an appropriation of costs, would have been included in that modelling.

Mr Kurz considered that the provision of real-time visibility was something that could be considered. However, Mr Kurz agreed with the Chair, Mr Sharafi and Mr Peake that there was a limit on the scope of what the MAC could consider in the absence of a Government direction.

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Item	Subject	Action
	Attendees did not propose any other changes to the Issues List.	
	Action: SEN to provide a description of its proposed emissions-related amendment to the WEM Rules for discussion by the MAC and potential inclusion on the Issues List.	SEN

6 Update on WA Government Reforms

Mr Thomas provided the following updates:

- The final meeting of the Energy Transformation Taskforce (Taskforce) was scheduled for 14 May 2021.
- The Energy Transformation Information Unit (ETIU) published a consultation paper "Proposals for changes to Market Power Mitigation Mechanisms" on 31 March 2021 and discussed the paper at the Transformation Design and Operation Working Group (TDOWG) meeting on 19 April 2021. The submission period closed on 28 April 2021. ETIU's intention was for a policy position on that package of measures to be agreed at the 14 May 2021 Taskforce meeting.
- ETIU expected to publish an information paper that summarised the Taskforce's decisions on the power system security and reliability (PSSR) framework by 28 April 2021.
- A consultation paper on further changes to the Electricity
 Networks Access Code (Access Code) was due to be
 published on 28 April 2021 for a four-week consultation
 period. The changes mainly related to the instruments
 required within the Access Code to give effect to
 constrained network access. ETIU intended to schedule an
 industry forum to facilitate consultation on the changes.
- ETIU planned to hold a TDOWG meeting on Non-Co-optimised Essential System Services (NCESS) in early May 2021.
- ETIU also intended to hold an industry forum in late May 2021 to summarise the Taskforce's work program over the last two years and outline the work program to continue after the expiry of the Taskforce on 19 May 2021. EPWA intends for the reform program to continue beyond the life of the Taskforce. Future work will include development of Amending Rules to implement the Taskforce's decisions on market power mitigation, the PSSR framework and NCESS; and implementation of action items from the Distributed Energy Resources (DER) roadmap. Work on the second

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Item	Subject		Action
	WOSP months	was also expected to commence in the next few s.	
		ntended to publish a 12-month progress report on the padmap within the next few weeks.	•

7 Update on AEMO Procedure Change Working Group

Mr Mark Katsikandarakis noted that AEMO had been pursuing Procedure Change Proposal AEPC_2020_01 to revise the Balancing Merit Order tie-break methodology through changes to two WEM Procedures (Balancing Facility Requirements and Balancing Market Forecast).

The issue was impacted by Pre-Rule Change Proposal RC_2020_04 (Balancing Facility Loss Factor Adjustment) that the Rule Change Panel had agreed to develop. After reflection on this Pre-Rule Change Proposal, AEMO had decided to reject AEPC_2020_01 and to manage any security issues during periods of low demand via dispatch.

The Procedure Change Report rejecting AEPC_2020_01 was due to be published on 30 April 2021.

8(a) Overview of Rule Change Proposals

The MAC noted the overview of Rule Change Proposals.

The Chair provided the following updates:

- The Amending Rules for Rule Change Proposal RC_2014_03 (Administrative Improvements to the Outage Process) are due to commence on 29 June 2021.
- Rule Change Proposals RC_2014_05 (Reduced Frequency of the Review of the Energy Price Limits and the Maximum Reserve Capacity Price), RC_2019_01 (The Relevant Demand calculation) and RC_2018_03 (Capacity Credit Allocation Methodology for Intermittent Generators) will be transferred to the Coordinator on 1 July 2021. The deadlines for the Draft Rule Change Reports for these Rule Change Proposals (currently 30 June 2021) will be extended accordingly.
- The Draft Rule Change Report for RC_2019_03 (Method used for the assignment of Certified Reserve Capacity to Intermittent Generators) was published on 20 April 2021 and the Relevant Level Method (RLM) model used by the Panel to assess the Rule Change Proposal was published on 23 April 2021. The model contained all the data used for the analysis, except that:

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 historical facility output values that were derived from Meter Data Submissions were replaced with the corresponding SCADA values, because some parties could not agree to the publication of the meter data; and

 the estimated Forced Outage rates for two Scheduled Generators with no outage history were removed and replaced by zero.

These changes meant that stakeholders would not be able to fully duplicate the Panel's results, but the Chair considered that stakeholders may still find the model useful as a means to understand the report and the proposed RLM.

The Chair invited stakeholders to contact RCP Support if they had any questions about the model, but noted that RCP Support could not provide technical support on matters such as the operation of Python.

• The second submission period for RC_2019_03 closed on 19 May 2021 and the deadline for the Final Rule Change Report was 17 June 2021, which was only nine Business Days before the Panel was abolished. Therefore, as indicated in the Draft Rule Change Report, the Panel did not intend to extend the second submission period. Any extensions to the second submission period would likely lead to the need to transfer responsibility for RC_2019_03 to the Coordinator, which would further lengthen the timeline to finalise the Rule Change Proposal and make it virtually impossible for AEMO to implement the new method in time for the 2021 Reserve Capacity Cycle.

The Chair noted that the Panel had asked him to convene a MAC workshop to discuss RC_2019_03 as close as possible to the midpoint of the second submission period (around 5 May 2021). The Panel had also asked him to offer for RCP Support to consult with stakeholders on RC_2019_03 on a one-on-one basis. The intent for the workshops was primarily to allow stakeholders to raise questions, or make comments, as early as possible for the Panel's consideration. The workshops were also intended to advise stakeholders about the key aspects of the Panel's decision and the rationale for the decision, so that stakeholders can make informed submissions.

RCP Support sought stakeholder feedback on the consultation process, inviting stakeholders to request one-on-one meetings and asking whether stakeholders would prefer a single workshop on 7 May 2021, or to split the workshops and discuss the decision on 7 May 2021 and the rule drafting on

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11 May 2021. The workshops were delayed from the original target date of 5 May 2021 to avoid conflict with the Energy in WA Conference.

RCP Support had not yet received any requests for a one-on-one consultation. AEMO indicated a preference for a single session but indicated it would attend both sessions if that approach was taken. RCP Support received one response from a Market Customer preferring a single session, and responses from three Market Generators and Western Power preferring two sessions, along with one response from a consultant.

The three Market Generators also asked to defer the workshops to the following week given the importance of the issue and the Energy in WA Conference. However, given the extremely tight timeline to finalise RC_2019_03, RCP Support was very reluctant to defer the workshops, as this would limit the Panel's ability to consider the early feedback from the workshops and could put the timeline further at risk.

The Chair asked whether, given the timing constraints on the Rule Change Proposal and the limited responses received, MAC members preferred to continue with the workshops or for RCP Support to cancel the workshops and hold one-on-one sessions with the people who had responded.

Mr Tom Frood and Mr Timothy Edwards were in favour of holding the workshops, while Mr Geoff Gaston indicated that he would be happy with one-on-one meetings. Mrs Jacinda Papps advised that Alinta was probably likely to ask for a one-one-one meeting as well as wanting to attend the workshops, but had not yet made the request as it was still reviewing the Draft Rule Change Report. Alinta was keen for the workshops to be delayed until 11 May 2021, because it would struggle to be ready for a workshop on 7 May 2021 due to resourcing issues and the complexity of the report.

The Chair advised that based on this feedback RCP Support would continue with the workshops, and asked for views on holding the first workshop on the afternoon of 7 May 2021 (the morning being unsuitable because of conflict with a scheduled demonstration of the WOSP Dashboard). Mr Frood and Mr Edwards both indicated that they could attend a workshop at that time.

The Chair advised that RCP Support would consider the feedback provided by the MAC before confirming the timing of the workshops. The Chair also requested that attendees send him any topics of discussion or specific questions that they

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Item	Subject	Action
	would like to have covered ahead of time, to assist with RCP Support's preparation for the workshops.	

9 Part 2 discussion on amending market rules intended to incentivise the availability of generators

Mr Richard Cheng gave a presentation to continue the discussion from the 2 February 2021 MAC meeting on the ERA's findings and recommendations from its "2020 review of two market rules intended to incentivise the availability of generators" (**ERA review**) final report (**final report**). A copy of the ERA's presentation is available in the meeting papers.

The following points were discussed:

- In response to a question from Mr Sharafi, Mr Cheng confirmed that the WEM Rules did not specify a deadline for the ERA to submit a Rule Change Proposal to implement the final report's recommendations, and that the ERA had not yet set a firm submission date.
- Mr Oscar Carlberg asked what would trigger progression of the ERA's Rule Change Proposal, e.g. whether this would be driven by the outcomes of EPWA's proposed wholesale Reserve Capacity Mechanism (RCM) review (EPWA review) and whether the Rule Change Proposal would remain on the ERA's work plan.

Mr Cheng replied that the ERA hoped that its findings would be used as input to the EPWA review, but did not yet know when the EPWA review would occur or what it would incorporate. Mr Cheng also noted the current WEM Rules gave the ERA a limited scope in terms of what it could propose in the Rule Change Proposal. However, the ERA would have expanded Rule Change Proposal powers from 1 July 2021, which while not a trigger in itself, would allow the ERA to look at more issues in its Rule Change Proposal.

Mr Cheng noted that the ERA was required to consult with the MAC under clause 2.5.1B before undertaking any further work to develop the Rule Change Proposal, so MAC members would be advised well in advance of the ERA's decision to progress this work.

 Mr Carlberg reiterated that Alinta supported consideration of the proposed changes to the assignment of Certified Reserve Capacity (CRC) as part of a broader review of the RCM, to ensure those changes are not considered in isolation. Mr Cheng agreed that the changes needed to be considered as part of a holistic review of the RCM.
 Mr Cheng also noted that, given the changes that are 12 Page 12 of 54

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happening to the entire market, the ERA did not want to propose a rule change that would not work under the new market arrangements.

• Mr Peake suggested that when considering changes to the RCM, it was important to go back to the fundamental purpose of the RCM, which was to make sure enough capacity was brought on stream. Mr Peake considered there was a real danger of future capacity shortfalls because the current RCM was unlikely to encourage the entry of new capacity. While Perth Energy owned a small gas fired power station that would benefit from capacity shortages, as a retailer it was concerned about the adverse impacts on its customers.

Mr Peake considered that bringing in changes because they appeared to be more academically sound was the wrong approach and would discourage future investment. Without a full review of the RCM, followed by an extended period of stability, the RCM would continue to discourage the entry of new capacity.

Mr Carlberg and Mr Gaston agreed with Mr Peake's comments. Mr Cheng agreed with Mr Peake that a holistic review of the RCM was necessary to ensure that it was achieving its purpose.

- Mr Sharafi noted that AEMO agreed with the rationale for the ERA's proposed changes and considered that the EPWA review should focus on the Planning Criterion.
- Mr Peake expressed a view that, under the current WEM Rules, over-acquisition of capacity reduced customers' costs because the Reserve Capacity Price falls very quickly if there is excess capacity. For this reason, Mr Peake considered that the only risk to customers was having too little capacity available.

Mr Cheng agreed with Mr Peake about the effect of excess capacity on the Reserve Capacity Price, while noting that it would still be preferable to avoid over-procuring capacity. Mr Cheng noted that the ERA had found that the WEM was, in general, over-forecasting and therefore under-procuring the level of reliable capacity that was needed to meet the required reliability standard.

 Ms Wendy Ng noted that the RCM was originally designed to cater for the summer period, e.g. Individual Reserve Capacity Requirements are based on consumption during the summer period. Ms Ng understood system stress periods could occur throughout the year, and suggested 13 Page 13 of 54

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that it may be appropriate for the EPWA review to consider that issue. However, as it currently stood, the RCM was unfortunately designed around summer.

Mr Cheng, Mr Carlberg and Mr Kurz all agreed with Ms Ng's comment.

- Mr Carlberg noted that Alinta disagreed with the EFORd proposal. Alinta considered that while the method assumed past outages can predict future availability, EFORd would not accurately predict generators' availability for the following reasons:
 - EFORd was a lagging indicator. After experiencing a Forced Outage, a generator has at least two years to rectify the issue after it is accredited. The EFORd measure would not reflect any such rectifications.
 - A higher EFORd is likely to reflect a generator that runs more often compared to generator with a lower EFORd, rather than a generator with lower availability.
 Conversely, a lower EFORd is likely to indicate a generator that does not run often rather than a generator that is more available.
 - Forced Outages can happen for a variety of reasons that are unlikely to re-occur. They can also be difficult to delineate from outages caused by external constraints. As a result, the EFORd may penalise generators for many factors outside their control.
 - New generators will likely be assigned Forced Outage rates arbitrarily, based on their Original Equipment Manufacturer's predictions which are not standardised.

Alinta also considered that the proposal would not improve incentives for baseload and mid-merit generators to be available, despite disproportionately penalising them compared to other generators. These generators already had greater incentive to be available for revenue and to avoid refunds.

Mr Peake and Ms Ng agreed with Mr Carlberg's comments.

 Mr Kurz agreed with Mr Carlberg's comments, and also noted that the way generators were currently being run and responding to operational limits within the network was exposing them to additional operational risk. Mr Kurz suggested that the balance of risk versus reward in the market was continually being distorted by the imposition of additional risks on generators.

Ms Jo-Anne Chan agreed with Mr Kurz's comments.

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• The Chair noted that the Market Generators in the MAC were in agreement about the ERA's recommendations. Mr Peake noted that he was a Market Customer representative, and was concerned that customers would incur the costs of extra generation or loss of supply. Mr Edwards noted that he was also a Market Customer representative.

 Ms Jenny Laidlaw asked whether the ERA had undertaken any analysis to assess how accurately AEMO would be able to estimate the future Forced Outage rates of Scheduled Generators, since this would affect the benefits of the change.

Mr Cheng replied that the ERA had referenced international practice that uses historical EFORd as a proxy to forecast outages into the future. Mr Cheng also stated that the ERA had not performed its own work yet to apply EFORd to the WEM. This was one of the matters that the ERA intended to consider as part of what would be the cost-benefit analysis part of developing the Rule Change Proposal.

Dr Matt Shahnazari added that the issue was not really about improved accuracy, but that the current WEM Procedure: Facility Outages was measuring a factor that is irrelevant to the capacity value of Scheduled Generators. It was important to first have a good measure of the probability of future outages. It was also important to ensure that AEMO used the best available information to minimise forecast error, recognising that the error could never be completely eliminated.

Ms Laidlaw agreed that the current Forced Outage rate calculation in the WEM Procedure could be improved, but did not consider that this answered her original question about how accurate the improved calculation was as a predictor. Ms Laidlaw considered that there was a risk of change for the sake of change unless it brought some improvement in forecasting accuracy.

- Mr Porter considered that generators provided Essential System Services (ESS) for free under the current WEM Rules, and that there needed to be consideration for ESS to be more quickly brought into the commercial equations for payment of same. However, for the future, the age, generator type and current operational duty (i.e. "ramping") of many of the generators was inappropriate for current market needs.
- Mr Peake considered that it would be very hard to estimate EFORd at peak times because the WEM had experienced

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very few 41 degree events. Mr Cheng replied that system stress events can occur throughout the Capacity Year and not only when the temperature reached 41 degrees.

 Mr Carlberg asked whether the approach would be to predict when system stress periods will occur and the conditions that will exist in those periods, and then predict generators' output in those scenarios. Mr Carlberg considered that such an approach would be prone to forecast error.

Mr Cheng replied that forecast error would still be factored into the Planning Criterion calculation. Historical EFORd would be used as a proxy to figure out what the future likelihood is of a generator being on Forced Outage when it is needed, as Forced Outages are not known in advance. This proxy would be used in the absence of AEMO being provided other information such as corrective action like extra/additional maintenance that could change the likelihood of the generator being available during system stress periods.

Dr Shahnazari considered that the important questions relating to forecasting the capacity value of a Scheduled Generator were, what was the best method of forecasting the capacity value, and who was best placed to manage the inevitable risk of forecasting error and its associated costs. Dr Shahnazari noted that under the current WEM Rules, the costs associated with this forecasting error were passed to consumers.

Mr Carlberg reiterated his concerns that the results of using EFORd would be arbitrary, with some generators being more adversely impacted than others.

Dr Shahnazari noted that EFORd was not an arbitrary calculation developed internally by the ERA. The ERA had looked at the principles of design of capacity markets around the world, and had identified that the WEM Procedure Forced Outage rate calculation was producing numbers that were totally irrelevant. The EFORd calculation was precisely defined in international standards.

- Ms Laidlaw asked how the EFORd calculation will determine when a generator was required. Mr Cheng replied that this was something that the ERA would explore in more detail with AEMO and other parties when it developed the Rule Change Proposal.
- Mr Edwards questioned whether it would be more prudent to increase the testing periods for generators to resolve the

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ERA's concerns about their availability. Mr Cheng and Dr Shahnazari agreed that increased testing would help to assess the future capacity value of generators that ran very infrequently. However, Dr Shahnazari noted that there was a cost associated with increased testing, so a cost-benefit analysis would be needed to determine a reasonable frequency for testing generators.

- Mr Sharafi agreed with the ERA that Forced Outage rates should be based on the periods when a generator was required; otherwise the rarely run generators might not be available when needed.
- Mr Edwards suggested that any statistic would require more than 20 test samples to be suitable, both for generators and Demand Side Programmes. Mr Cheng replied that one of the reasons why the ERA proposed to use a longer time period for the EFORd calculation (five years) was to increase the sample size.
- Mr Peake noted that often generators were running not because their capacity was actually needed but because they were the cheapest units available. If you wanted to consider periods when a generator was needed you would need to consider the peak stress Trading Intervals.

Dr Shahnazari acknowledged that some generators ran during periods of low system stress and were called into service quite frequently. However, the EFORd measure still provided a good proxy for the performance of the generator during high system stress periods. It was not difficult to calculate EFORd for generators that were called to run very frequently. It was more difficult for generators that hardly ever ran but had failed when tested, due to the small sample size. However, increasing test frequency and increasing the calculation period were two possible solutions to that problem.

Mr Peake considered that the current approach, where a general Forced Outage rate was incorporated into the reserve margin, seemed a better approach, given the small available sample size for peaking generators.

Dr Shahnazari replied that including an allowance for expected Forced Outages in the reserve margin created a free-riding problem. Under the ERA's proposal, generators that perform well in terms of availability would benefit, while generators that perform badly would probably lose some of their Capacity Credits. Dr Shahnazari considered it was important to reward generators that perform well and penalise those that do not; and that the reserve margin

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should not be used to account for expected outages, and this was not the practice in other capacity markets around the world.

 Mr Porter suggested there would be a much greater distribution of generator assets and much more reliable generation in future, reducing the need for the RCM.

Mr Porter suggested that consideration be made in the WEM Rules for futurism, so that rather than trying to prop up old technologies that are unfit for purpose, the WEM Rules should incentivise new technology to enter the market and replace the old fossil fuel technology that was far less reliable.

Ms Ng noted that the current process for assigning Certified Reserve Capacity to Scheduled Generators accounted for the de-ratings that might occur at 41 degrees Celsius, so it was not like the Scheduled Generators were not performing to their expected levels. Ms Ng noted that the WEM Rules required technology neutrality and did not consider that discussion of futurism or old technology was appropriate.

10 General Business

The Chair noted that only one more MAC meeting was scheduled before the transfer of rule-making functions to the Coordinator. The Chair suggested that it might be worthwhile to discuss how the upcoming transition would work in that meeting.

Mr Kurz expressed support for the Chair's suggestion.

The meeting closed at 11:10 AM



Agenda Item 4: MAC Action Items

Meeting 2021_06_08

Shaded	Shaded action items are actions that have been completed since the last Market Advisory Committee (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
3/2021	RCP Support is to schedule a discussion at the next MAC meeting on whether the consideration of emissions costs in the assessment of Rule Change Proposals should be included as an issue in the Issues List.	RCP Support	2021_02_02	Closed This matter was discussed under Agenda Item 5 at the MAC meeting on 27 April 2021.
4/2021	RCP Support to publish the minutes of the 2 February 2021 MAC meeting on the Rule Change Panel's (Panel) website as final.	RCP Support	2021_04_27	Closed The minutes were published on the Panel's website on 27 April 2021.



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Item	Action	Responsibility	Meeting Arising	Status
5/2021	Sustainable Energy Now (SEN) to provide a description of its proposed emissions-related amendment to the WEM Rules for discussion by the MAC and potential inclusion on the Issues List.	SEN	2021_04_27	Open SEN has not yet provided an issue for inclusion in the Issues List.



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Agenda Item 5: MAC WEM Rules Issues List Update

Meeting 2021 06 08

The latest version of the Market Advisory Committee (MAC) WEM Rules Issues List (Issues List) is available in Attachment 1 of this paper.

The MAC maintains the Issues List to track and progress issues that have been identified by Wholesale Electricity Market (**WEM**) stakeholders. A stakeholder may raise a new issue for discussion by the MAC at any time by emailing a request to the MAC Chair.

Updates to the Issues List are indicated in <u>red font</u>, while issues that have been closed since the last publication are shaded in grey.

Recommendation:

RCP Support recommends that the MAC:

- provide any further updates to existing issues; and
- indicate whether there are any new issues to be raised.

Review of the Issues List:

The MAC has agreed that it would like to commence a review in February 2021 of the Issues List against the Energy Transformation Strategy (**ETS**).

However, RCP Support has not conducted this review because it has instead focused its resources on finalising RC 2019 03 (Method used for the assignment of Certified Reserve Capacity to Intermittent Generators). Therefore, the review of which issues have been addressed by the ETS will not be commenced until after responsibility for administration of the WEM Rules is transferred to the Coordinator of Energy on 1 July 2021.



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Agenda Item 5 – Attachment 1 – MAC Market Rules Issues List

	Table 1 – Potential Rule Change Proposals			
ld	Submitter/Date	Issue	Urgency and Status	
45	AEMO May 2018	Transfer of responsibility for setting document retention requirements AEMO suggested that responsibility for setting document retention requirements (clauses 10.1.1 and 10.1.2 of the Market Rules) should move from AEMO to the ERA. AEMO considers that it is not the best entity to hold this responsibility as it no longer maintains the broader market development and compliance functions of the IMO.	Panel rating: Low MAC ratings: Low Status: The Energy Transformation Implementation Unit (ETIU) will consider who is to be responsible for setting document retention requirements as part of the Tranche 5 Amending Rules for the ETS and will consult on these matters in early 2021.	
46	AEMO May 2018	Transfer of responsibility for setting confidentiality statuses AEMO suggested that responsibility for setting confidentiality statuses (clauses 10.2.1 and 10.2.3 of the Market Rules) should move from AEMO to the ERA. AEMO considers that it is not the best entity to hold this responsibility as it no longer maintains the broader market development and compliance functions of the IMO.	Panel rating: Low MAC ratings: Low Status: ETIU will consider who is to be responsible for setting confidentiality statuses as part of the Tranche 5 Amending Rules for the ETS and will consult on these matters in early 2021.	
47	AEMO September 2018	Market Procedure for conducting the Long Term PASA (clause 4.5.14) The scope of this procedure currently includes describing the process that the ERA must follow in conducting the five-yearly review of the Planning Criterion and demand forecasting process. AEMO considers that its Market Procedure should not cover the ERA's review, and the ERA should be able to independently scope the	Panel rating: Low MAC ratings: Low Status: This issue has not been progressed.	



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	Table 1 – Potential Rule Change Proposals				
ld	Submitter/Date	Issue	Urgency and Status		
		review. As such, AEMO recommends removing this requirement from the head of power in clause 4.5.14 of the Market Rules.			
55	MAC April 2019	Conflict between Relevant Level Methodology and the early and conditional certification of Intermittent Generators There is a conflict between the current and proposed Relevant Level Methodologies and the early and conditional certification of new Intermittent Generators, because the methodologies depend on information that is not available before the normal certification time for a Reserve Capacity Cycle.	MAC ratings: Low Status: On 15 August 2019, Mr Maticka advised RCP Support that AEMO has revised its position and is now of the view that there is an opportunity as part of RC_2019_03 to remove Clause 4.28C.7 that relates to Early Certification of Reserve Capacity (CRC). The draft proposal states that AEMO "must reject the early certification application if it has cause to believe that it cannot reliably set the Early CRC"; otherwise, AEMO must set Early CRC within 90 days of receiving the application. It appears that it is almost certain that AEMO cannot reliably set the Early CRC for an early certification application if an intermittent Facility nominates to use clause 4.11.2(b) for the assessment. This is because: • An early certification application may be submitted at any time before 1 January of Year 1 of the Reserve Capacity Cycle to which the application relates [clause 4.28C.2].		



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	Table 1 – Potential Rule Change Proposals			
ld	Submitter/Date	Issue	Urgency and Status	
	Submitter/Date		 This means that when AEMO receives an application under 4.11.2(b), it can't calculate a reliable Relevant Level value for the Facility, as it is not certain: which Scheduled Generators, DSPs, and Non-Scheduled Generators would apply for certification; or what level of CRC would be assigned to these Scheduled Generators and DSPs. AEMO also stated that: Neither a complete set of system demand and Facility actual meter data is available nor are the expected capacity estimates of new Candidate Facilities. It almost implies that in fact only Scheduled Generators can apply and be certified for Early Certification. Noting an application of this nature has not been provided in the past years, AEMO suggests removal of this clause completely. The MAC discussed this issue at its meeting on 3 September 2019 where it was noted that the issue could be addressed as a standalone Rule Change Proposal or as part RC_2019_03. The ERA is considering whether it wants to address 	



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	Table 1 – Potential Rule Change Proposals				
ld	Submitter/Date	Issue	Urgency and Status		
			the issue as part of RC_2019_03, and if not, then RCP Support will bring the issue back to the MAC for further discussion.		
			The Market Rules governing the early and conditional certification of intermittent generation may be addressed by the rule changes that ETIU is developing to assign Capacity Credits under the constrained network access model. The ERA will liaise with ETIU as it develops these rule changes. The ERA intends to base RC_2019_03 on the revised Market Rules developed by ETIU and approved by the Minister.		
56	Perth Energy	Issues with Reserve Capacity Testing	Panel rating: TBD		
	July 2019	 Market Generators that fail a Reserve Capacity Test may prefer to accept a small shortfall in a test (and a corresponding reduction in their Capacity Credits) than to run a second test. 	MAC ratings: TBD Status: Perth Energy has indicated that it will develop a		
		There is a discrepancy between the number of Trading Intervals for self-testing vs. AEMO testing.	Pre-Rule Change Proposal for consideration by the MAC.		
		There is ambiguity in the timing requirements for a second test when the relevant generator is on an outage.			
		There is ambiguity on the number of Capacity Credits that AEMO is to assign when certain test results occur.			



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Notes:

• The Potential Rule Change Proposals are well-defined issues that could be addressed through development of a Rule Change Proposal.

- If the MAC decides to add an issue to the Potential Rule Change Proposals list, then RCP Support will seek a preliminary urgency rating from MAC members/observers and from the Rule Change Panel (**Panel**) and will include this information in the list.
- Potential Rule Change Proposals will be closed after a Pre-Rule Change Proposal is presented to the MAC or a Rule Change Proposal is submitted to the Panel.



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	Table 2 – Broader Issues			
ld	Submitter/Date	Issue	Urgency and Status	
1	Shane Cremin November 2017	IRCR calculations and capacity allocation There is a need to look at how IRCR and the annual capacity requirement are calculated (i.e. not just the peak intervals in summer) along with recognising behind-the-meter solar plus storage. The incentive should be for retailers (or third-party providers) to reduce their dependence on grid supply during peak intervals, which will also better reflect the requirement for conventional 'reserve capacity' and reduce the cost per kWh to consumers of that conventional 'reserve capacity'.	To be considered in the preliminary review of the Reserve Capacity Mechanism.	
2	Shane Cremin November 2017	Allocation of market costs – who bears Market Fees and who pays for grid support services with less grid generation and consumption?	To be considered in the preliminary reviews of behind-the-meter issues and the basis for allocation of Market Fees. The WA Government published the DER Roadmap on 5 April 2020, but the MAC agreed to keep this issue on the list until further information is available on how Energy Policy WA (EPWA) intends to develop and implement the actions from the DER Roadmap.	
3	Shane Cremin November 2017	Penalties for outages.	To be considered in the preliminary review of the Reserve Capacity Mechanism.	
4	Shane Cremin November 2017	Incentives for maintaining appropriate generation mix.	To be considered in the preliminary review of the Reserve Capacity Mechanism.	



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	Table 2 – Broader Issues				
ld	Submitter/Date	Issue	Urgency and Status		
9	Community Electricity November 2017	Improvement of AEMO forecasts of System Load; real-time and day-ahead	To be considered in the preliminary review of forecast quality.		
16	Bluewaters November 2017	Behind the Meter (BTM) generation is treated as reduction in electricity demand rather than actual generation. Hence, the BTM generators are not paying their fair share of the network costs, Market Fees and ancillary services charges. Therefore, the non-BTM Market Participants are subsiding the BTM generation in the WEM. Subsidy does not promote efficient economic outcome. Rapid growth of BTM generation will only exacerbate this inefficiency if not promptly addressed. Bluewaters recommends changes to the Market Rules to require BTM generators to pay their fair share of the network costs, Market Fees and ancillary services charges. This is an example of a regulatory arrangement becoming obsolete due to the emergence of new technologies. Regulatory design needs to keep up with changes in the industry landscape (including technological change) to ensure that the WEM continues to meet its objectives. If this BTM issue is not promptly addressed, there will be distortion in investment signals, which will lead to an inappropriate generation facility mix in the WEM, hence compromising power system security and in turn not promoting the Wholesale Market Objectives.	To be considered in the preliminary reviews of behind-the-meter issues and the basis for allocation of Market Fees. The WA Government published the DER Roadmap on 5 April 2020, but the MAC agreed to keep this issue on the list until further information is available on how EPWA intends to develop and implement the actions from the DER Roadmap.		



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	Table 2 – Broader Issues				
ld	Submitter/Date	Issue	Urgency and Status		
23	Bluewaters November 2017	Allocation of Market Fees on a 50/50 basis between generators and retailers may be overly simplistic and not consider the impacts on economic efficiency. In particular, the costs associated with an electricity market reform program should be recovered from entities based on the benefit they receive from the reform. This is expected to increase the visibility of (and therefore incentivise) prudence and accountability when it comes to deciding the need and scope of the reform. Recommendations: to review the Market Fees structure including the cost recovery mechanism for a reform program. The cost saving from improved economic efficiency can be passed on to the end consumers, hence promoting the Wholesale Market Objectives.	To be considered in the preliminary review of the basis for allocation of Market Fees.		
30	Synergy November 2017	Reserve Capacity Mechanism Synergy would like to propose a review of Market Rules related to reserve capacity requirements and reserve capacity capability criteria to ensure alignment and consistency in determination of certain criteria. For instance: • assessment of reserve capacity requirement criteria, reserve capacity capability and reserve capacity obligations; • IRCR assessment; • Relevant Demand determination; • determination of NTDL status; • Relevant Level determination; and	To be considered in the preliminary review of the Reserve Capacity Mechanism.		



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	Table 2 – Broader Issues				
ld	Submitter/Date	Issue	Urgency and Status		
		assessment of thermal generation capacity. The review will support Wholesale Market Objectives (a) and (d).			
35	ERM Power November 2017	BTM generation and apportionment of Market Fees, ancillary services, etc. The amount of solar PV generation on the system is increasing every year, to the point where solar PV generation is the single biggest unit of generation on the SWIS. This category of generation has a significant impact on the system and we have seen this in terms of the daytime trough that is observed on the SWIS when the sun is shining. The issue is that generators that are on are moving around to meet the needs of this generation facility but this generation facility, which could impact system stability, does not pay its fair share of the costs of maintaining the system in a stable manner. That is, they are not the generators that receive its fair apportionment of Market Fees and pay any ancillary service costs but yet they have absolute freedom to generate into the SWIS when the fuel source is available. There needs to be equity in this equation.	To be considered in the preliminary reviews of behind-the-meter issues and the basis for allocation of Market Fees. The MAC recognised that the Minister has commenced work on BTM issues and flagged that issue 35 should be considered as part of the ETS. The WA Government published the DER Roadmap on 5 April 2020, but the MAC agreed to keep this issue on the list until further information is available on how EPWA intends to develop and implement the actions from the DER Roadmap.		
39	Alinta Energy November 2017	Commissioning Test Process The commissioning process within the Market Rules and PSOP works well for known events (i.e. the advance timings of tests). However, the Market Rules and PSOP do not work for close to real time events. There is limited flexibility in the Market Rules and PSOP to deal with the practical and operational realities of commissioning facilities. The Market Rules and PSOP require System Management to approve a Commissioning Test Plan or a revised Commissioning Test Plan by	To be considered in the preliminary review of the Commissioning Tests.		



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	Table 2 – Broader Issues				
ld	Submitter/Date	Issue	Urgency and Status		
		8:00 AM on the Scheduling Day on which the Commissioning Test Plan would apply.			
		If a Market Participant cannot conform to its most recently approved Commissioning Test Plan, the Market Participant must notify System Management; and either:			
		withdraw the Commissioning Test Plan; or			
		if the conditions relate to the ability of the generating Facility to conform to a Commissioning Test Schedule, provide a revised Commissioning Test Plan to System Management as soon as practicable before 8:00 AM on the Scheduling Day prior to the commencement of the Trading Day to which the revised Commissioning Test Plan relates.			
		Specific Issues:			
		This restriction to prior to 8:00 AM on the Scheduling Day means that managing changes to the day of the plan are difficult. Sometimes a participant is unaware at that time that it may not be able to conform to a plan. Amendments to Commissioning Tests and schedules need to be able to be dealt with closer to real time.			
		Examples for improvements are:			
		 allowing participants to manage delays to the start of an approved plan; and 			
		 allowing participants to repeat tests and push the remainder of the Commissioning Test Plan out. 			
		Greater certainty is needed for on the day changes (i.e. there is uncertainty as to what movements/timing changes acceptable within the "Test Window" i.e. on the day).			



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Wholesale Market Objective Assessment:

A review of the Commissioning Test process, with a view to allowing greater flexibility to allow for the technical realities of commissioning, will better achieve:

- Wholesale Market Objective (a):
 - Allowing generators greater flexibility in undertaking commissioning activities will allow the required tests to be conducted in a more efficient and timely manner, which should result in the earlier availability of approved generating facilities. This contributes to the efficient, safe and reliable production of energy in the SWIS.
 - Productive efficiency requires that demand be served by the least-cost sources of supply, and that there be incentives for producers to achieve least-cost supply through a better management of cost drivers. Allowing for a more efficient management of commissioning processes, timeframes and costs in turn promotes the economically efficient production and supply of electricity.
- Wholesale Market Objective (b): improvements to the efficiency of the Commissioning Test process may assist in the facilitation of efficient entry of new competitors.
- Wholesale Market Objective (d):
 - Balancing appropriate flexibility for generators with appropriate oversight and control for System Management should ensure that the complex task of commissioning is not subject to unnecessary red tape, adding to the cost of projects. This contributes to the achievement of Wholesale Market Objective (d) relating to the long-term cost of electricity supply.



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	Table 2 – Broader Issues					
ld	Submitter/Date	Issue	Urgency and Status			
		 Impacts on economic efficiency and efficient entry of new competitors (as outlined above) will potentially lead to the minimisation of the long-term cost of electricity supplied. 				

Notes:

- Some issues require further discussion/review before specific Rule Change Proposals can be developed. For these issues, the MAC will:
 - o group the issues together where appropriate;
 - o determine the order of priority for the grouped Broader Issues;
 - o conduct preliminary reviews to scope out the Broader Issues; and
 - o refer the Broader Issues to the appropriate body for consideration/development.
- RCP Support will aim to schedule preliminary reviews at the rate of one per MAC meeting, unless competing priorities prevent this.
- Broader Issues will be closed (or moved onto another sub-list) following the completion of the relevant preliminary review and any agreed follow-up discussions on the issue.
- The current list of preliminary reviews is shown in Table 3.

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Table 3 – Preliminary Reviews				
Review	Status			
(1) Behind-the-meter issues	Issues: 2, 16, 35. Status: Preliminary discussion is not yet scheduled. EPWA is working on its DER Roadmap, which will address behind-the-meter issues (amongst other things). A preliminary discussion of behind-the-meter issues is to be deferred until the DER Roadmap is published and then the MAC will consider whether a discussion is still required. The WA Government published the DER Roadmap on 5 April 2020, but the MAC agreed to keep this review on the list until further information is available on how EPWA intends to develop and implement the actions			
(2) Forecast quality	from the DER Roadmap. Issues: 9. Status: Preliminary discussion is not yet scheduled.			
(3) Commissioning Tests	Issues: 39. Status: Preliminary discussion is not yet scheduled.			
(4) The basis of allocation of Market Fees	Issues: 2, 16, 23 and 35. Status: Preliminary discussion is not yet scheduled.			
(5) The Reserve Capacity Mechanism (excluding the pricing mechanism)	Issues: 1, 3, 4, and 30. Status: Preliminary discussion is not yet scheduled. The preliminary discussion should address outstanding customer-side issues.			



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	Table 4 – Issues on Hold				
ld	Submitter/Date	Issue	Urgency and Status		
7	Community Electricity November 2017	Improved definition of the quantity of LFAS (a) required and (b) dispatched.	On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020), with potential input from work on RC_2017_02: Implementation of 30-Minute Balancing Gate Closure.		
10	AEMO November 2017	 Review of participant and facility classes to address current and looming issues, such as: incorporation of storage facilities; distinction between non-scheduled and semi-scheduled generating units; reconsideration of potential for Dispatchable Loads in the future (which were proposed for removal in RC_2014_06); whether to retain Interruptible Loads or to move to an aggregated facility approach (like Demand Side Programmes); and whether to retain Intermittent Loads as a registration construct or to convert to a settlement construct. Would support new entry, competition and market efficiency; particularly supporting the achievement of Wholesale Market Objectives (a) and (b). 	On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020). Treatment of storage facilities was considered under the preliminary review of the treatment of storage facilities in the market.		
11	AEMO November 2017	Whole-of-system planning oversight: As explained in AEMO's submission to the ERA's review of the WEM, AEMO considers the necessity of the production of an annual, independent Integrated Grid Plan to identify emerging issues and opportunities for investment at different	This issue was initially flagged for consideration as part of the preliminary review of roles in the market. However, ETIU has advised that the issue will be covered as part of the ETS, so the issue has been put on hold until the regulatory changes for the Foundation		



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	Table 4 – Issues on Hold					
ld	Submitter/Date	Issue	Urgency and Status			
		locations in the network to support power system security and reliability. This role would support AEMO's responsibility for the maintenance of power system security and will be increasingly important as network congestion increases and the characteristics of the power system evolve in the course of transition to a predominantly non-synchronous future grid with distributed energy resources, highlighting new requirements (e.g. planning for credible contingency events, inertia, and fast frequency response). This function would support the achievement of power system security and reliability, in line with Wholesale Market	Regulatory Frameworks workstream are known (mid-2020). ETIU is currently developing a Whole of System Plan (WOSP) to be delivered to Government and published in mid-2020. ETIU has indicated that the intent is to develop and publish updated Whole of System Plans on an ongoing, regular basis. The MAC agreed to keep issue 11 open pending publication of the WOSP.			
12	AEMO November 2017	Review of institutional responsibilities in the Market Rules. Following the major changes to institutional arrangements made by the Electricity Market Review, a secondary review is required to ensure that tasks remain with the right organisations, e.g. responsibility for setting confidentiality status (clause 10.2.1), document retention (clause 10.1.1), updating the contents of the market surveillance data catalogue (clause 2.16.2), content of the market procedure under clause 4.5.14, order of precedence of market documents (clause 1.5.2). This will promote efficiency in market administration, supporting Wholesale Market Objectives (a) and (d).	Potential changes to responsibilities for setting document retention requirements and confidentiality statuses have been listed as Potential Rule Change Proposals (issues 45 and 46). Potential changes to clause 4.5.14 have also been listed as a Potential Rule Change Proposal (issue 47). EPWA has advised that the remaining issues will be covered as part of the ETS, so the remaining issues have been put on hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).			



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	Table 4 – Issues on Hold				
ld	Submitter/Date	Issue	Urgency and Status		
14/36	Bluewaters and ERM Power November 2017	Capacity Refund Arrangements: The current capacity refund arrangement is overly punitive as Market Participants face excessive capacity refund exposure. This refund exposure is well more than what is necessary to incentivise the Market Participants to meet their obligations for making capacity available. Practical impacts of such excessive refund exposure include: • compromising the business viability of some capacity providers – the resulting business interruption can compromise reliability and security of the power system in the SWIS; and • excessive insurance premiums and cost for meeting prudential support requirements. Bluewaters recommended imposing seasonal, monthly and/or daily caps on the capacity refund. Bluewaters considered that reviewing capacity refund arrangements and reducing the excessive refund exposure is likely to promote the Wholesale Market Objectives by minimising: • unnecessary business interruption to capacity providers and in turn minimising disruption to supply availability; which is expected to promote power system reliability and security; and • unnecessary excessive insurance premium and prudential support costs, the saving of which can be passed on to consumers.	On 29 May 2018, the MAC agreed to place this issue on hold for 12 months (until June 2019) to allow time for historical data on dynamic refund rates to accumulate. On 29 July 2019, the MAC agreed that this issue has a low priority and should remain on hold for another 12 months.		



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	Table 4 – Issues on Hold			
ld	Submitter/Date	Issue	Urgency and Status	
17	Bluewaters November 2017	Under clause 3.21.7 of the Market Rules, a Market Participant is not allowed to retrospectively log a Forced Outage after the 15-day deadline; even if the Market Participant is subsequently found to be in breach of the Market Rules for not logging the Forced Outage on time. This can result in under reporting of Forced Outages, and as a consequence, use of incorrect information used in WEM settlements. Bluewaters recommend a rule change to enable Market Participants to retrospectively log a Forced Outage after the 15-day deadline. If a Market Participant is found to be in breach of the Market Rules by not logging the Forced Outage by the deadline, it should be required to log the outage. Accurately reporting outages will enable the WEM to function as intended and will help meet the Wholesale Market Objectives.	On hold pending a final decision on RC_2014_03: Administrative Improvements to the Outage Process.	
18	Bluewaters November 2017	The Spinning Reserve procurement process does not allow Market Participants to respond to the draft margin values determination by altering its Spinning Reserve offer. Bluewaters recommended amending the Market Rules to allow Market Participants to respond to the draft margin values determination by altering its Spinning Reserve offer. Allowing a Market Participant to respond to the draft margin values determination, can serve as a price signal to enable a price discovery process for Spinning Reserve capacity. This	On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).	



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		Table 4 – Issues on Hold	
ld	Submitter/Date	Issue	Urgency and Status
		is expected to lead to a more efficient economic outcome and in turn promote the Wholesale Market Objectives.	
19	Bluewaters November 2017	 The Spinning Reserve margin values evaluation process is deficient for the following reasons: shortcomings in the process for reviewing assumptions; inability to shape load profile; lack of transparency: (a) modelling was a "black box"; (b) confidential information limits stakeholders' ability to query the results; and lack to retrospective evaluation of spinning reserve margin values. As a result, the margin values have been volatile, potentially inaccurate and not verifiable. Recommendation: conduct a review on the margin values evaluation process and propose rule changes to address any identified deficiencies. Addressing the deficiencies in the margin values evaluation process can promote the Wholesale Market Objectives by enhancing economic efficiency in the WEM. This can be achieved through: promoting transparency – better informed Market Participants would be able to better respond to Spinning Reserve requirement in the WEM; and 	On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020). Also, AEMO and the ERA to consider whether any options exist to improve transparency of the current margin values process.



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		Table 4 – Issues on Hold	
ld	Submitter/Date	Issue	Urgency and Status
		allowing a better-informed margin values determination process, which is likely to give a more accurately priced margin values to promote an efficient economic outcome.	
22	Bluewaters November 2017	Prudential arrangement design issue: clause 2.37.2 of the Market Rules enables AEMO to review and revise a Market Participant's Credit Limit at any time. It is expected that AEMO will review and increase Credit Limit of a Market Participant if AEMO considers its credit exposure has increased (for example, due to an extended plant outage event). In response to the increase in its credit exposure, clause 2.40.1 of the Market Rules and section 5.2 of the Prudential Procedure allow the Market Participant to make a voluntary prepayment to reduce its Outstanding Amount to a level below its Trading Limit (87% of the Credit Limit). Under the current Market Rules and Prudential Procedure, AEMO can increase the Market Participant's Credit Limit (hence increasing its prudential support requirement) despite that a prepayment has already been paid (it is understood that this is AEMO's current practice). The prepayment would have already served as an effective means to reduce the Market Participant's credit exposure to an acceptable level. Increasing the Credit Limit in addition to this prepayment would be an unnecessary duplication of prudential requirement in the WEM.	 This issue was on hold pending completion of AEMO's 'Reduction of Prudential Exposure 2' project, which is now complete. AEMO noted that Credit Support and prepayment are important, but different prudential instruments: Credit Support must be provided to the level of the determined Credit Limit. Credit Support is a secured instrument and is held for use in a suspension or default event. A Market Participant's Trading Limit is set at 87% of the Credit Support provided. Prepayments are voluntary and may be provided by a Market Participant at any time. They are applied to reduce the Market Participant's Outstanding Amount, and thereby increasing its Trading Margin; and are applied to amounts payable by the Market Participant to AEMO for the next Settlement Statement. Prepayments are exhausted or consumed as a Market Participant receives STEM and NSTEM payable invoices. The direction is irrevocable. AEMO agrees that it is possible that a Market Participant could be in a situation where their Credit Limit is increased, requiring additional Credit Support, when they already have a prepayment balance vested with AEMO.



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Table 4 – Issues on Hold			
ld	Submitter/Date	Issue	Urgency and Status
		This unnecessary duplication is likely to give rise to higher-than-necessary prudential cost burden in the WEM; which creates economic inefficiency that is ultimately passed on the end consumers. Recommendation: amend the Market Rules and/or procedures to eliminate the duplication of prudential burden on Market Participants. The resulting saving from eliminating this unnecessary prudential burden can be passed on to end consumers. This promotes economic efficiency and therefore the Wholesale Market Objectives.	If this were to occur, it would be economically inefficient. AEMO expects that prepayments would be exhausted over time as a Market Participant receives STEM and NSTEM payable invoices. However, there may be circumstances where a prepayment is not exhausted in a timely fashion. An earlier version of the Prudential Requirements Market Procedure (v5.0) suggested that there may be a 'reconciliation of accounts' and that a prepayment may be returned. This was removed in APEC_2019_03 when this section was updated to reflect new prudential instrument templates. To address this potential economic inefficiency, the Prepayment Direction and/or Market Procedure could be
			changed to allow for an on request 'reconciliation of accounts' and return of a Market Participant's prepayment if this does not create a Trading Margin breach. An initial investigation would need to occur if a Rule Change is needed or if this could be done in a Market Procedure.
27/54	Kleenheat November 2017 MAC	Review what should constitute a Protected Provision of the Market Rules, to provide greater clarity over the role of the Minister for Energy.	On hold pending the outcome of an EPWA review of the current Protected Provisions in the Market Rules, with timing dependent on ETS.
	August 2018	A review of the Protected Provisions in the Market Rules is required to identify any that they no longer need to be Protected Provisions. This is because shifting the rule change function to the Panel has removed some of the potential	EPWA and RCP Support are to develop principles for identifying which rules should be Protected Provisions for presentation and discussion by the MAC.



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	Table 4 – Issues on Hold			
ld	Submitter/Date	Issue	Urgency and Status	
		conflicts of interest that led to the original classification of some Protected Provisions.		
28	Kleenheat November 2017	Appropriate rule changes to allow for battery storage. Consultation to decide how the batteries will be treated and classified as generators or not, whether batteries can apply for Capacity Credits and the availability status when the batteries are charging.	On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).	
33	ERM Power November 2017	Logging of Forced Outages The market systems do not currently allow Forced Outages to be amended once entered. This can have the distortionary effect of participants not logging an Outage until it has absolute certainty that the Forced Outage is correct, hence participants could take up to 15 days to submit its Forced Outages. If a participant could cancel or amend its Forced Outage information, it will likely provide more accurate and transparent signals to the market of what capacity is really available to the system. This should also assist System Management in generation planning for the system.	On hold pending a final decision on RC_2014_03: Administrative Improvements to the Outage Process.	
42	ERA November 2017	Ancillary Services approvals process Clause 3.11.6 of the Market Rules requires System Management to submit the Ancillary Services Requirements in a report to the ERA for audit and approval by 1 June each year, and System Management must publish the report by 1 July each year. The ERA conducted this process for the	On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).	



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		Table 4 – Issues on Hold	
ld	Submitter/Date	Issue	Urgency and Status
Id	Submitter/Date	 first time in 2016/17. In carrying out the process it became apparent that: there is no guidance in the rules on what the ERA's audit should cover, or what factors the ERA should consider in making its determination on the requirements; there are no documented Market Procedures setting out the methodology for System Management to determine the ancillary service requirements (the preferable approach would be for the methodologies to be documented in a Market Procedure, and for the ERA to audit whether System Management has followed the procedure); the timeframe for the ERA's audit and approval process (less than 1 month) limits the scope of what it can achieve in its audit; the levels determined by System Management are a function of the Ancillary Service standards, but the standards themselves are not subject to approval in this process; and the value of the audit and approval process is limited because System Management has discretion in real time to vary the levels from the set requirements. 	Urgency and Status
		The question is whether the market thinks this approvals process is necessary/will continue to be necessary (particularly in light of co-optimised energy and ancillary services). If so, then the issues above will need to be addressed, to reduce administrative inefficiencies and, if	



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ld	Submitter/Date	Issue	Urgency and Status
		more rigour is added to the process, provide economic benefits (Wholesale Market Objectives (a) and (d)).	
49	MAC November 2018	Should the method used to calculate constrained off compensation be amended to better reflect the actual costs incurred by Market Generators?	The Amending Rules from RC_2018_07 commenced on 1 July 2019. The MAC agreed to keep this issue on hold until 1 July 2020 to see if the issue requires further consideration.
51	MAC November 2018	There is a need to provide Market Customers with timely advance notice of their upcoming constraint payment liabilities.	The MAC agreed to place this issue on hold pending implementation of AEMO's proposed changes to the Outstanding Amount calculation in 2019.
53	MAC August 2018	 MAC members have identified the following issues with the provisions relating to generator models that were Gazetted by the Minister on 30 June 2017 in the Wholesale Electricity Market Rules Amending Rules 2017 (No. 3): The provisions allow for System Management, where it deems that the performance of a Generator does not conform to its models, to request updated models from Western Power and constrain the output of the Generator until these were provided, placing the Generator on a new type of Forced Outage and making it liable for Capacity Cost Refunds. Western Power is only required to comply with a request from System Management for updated models "as soon as reasonably practicable", leaving a Market Generator potentially subject to a Forced Outage for an extended period with no control over the situation. 	2020). AEMO agreed to provide an update to the MAC on the proposed arrangements for generator performance models proposed as part of the ETS.



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Table 4 – Issues on Hold			
ld	Submitter/Date	Issue	Urgency and Status
		The generator model information is assigned a confidentiality status of System Management Confidential, so that System Management is not permitted under the Market Rules to tell the Network Operator what model information it needs or explain the details of its concerns to the Market Generator.	
57	MAC October 2019	Identification of services subject to outage scheduling The Market Rules do not clearly define the 'services' that should be subject to outage scheduling (e.g. what services are provided by different items of network equipment, Intermittent Load facilities, dual-fuel Scheduled Generators, etc), and how the 'availability' of these services should be measured for each Outage Facility. This can lead to ambiguity about what constitutes an Outage for certain Outage Facilities. Additionally, if a Facility or item of network equipment can provide multiple services that require outage scheduling, then this concept should be clearly reflected in the Market Rules. The Amending Rules for RC_2013_15 clarified that a Scheduled Generator or Non-Scheduled Generator that is subject to an Ancillary Service Contract is required to schedule outages in respect of both sent out energy and each contracted Ancillary Service but did not seek to address the broader issue. (See section 7.2.2.5 of the Final Rule Change Report for RC_2013_15.)	The MAC agreed that this issue should be placed on hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).



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	Table 4 – Issues on Hold			
ld	Submitter/Date	Issue	Urgency and Status	
58	MAC October 2019	Outage scheduling for dual-fuel Scheduled Generators '0 MW' outages are currently used to notify System Management when a dual-fuel Scheduled Generator is unable to operate on one of its nominated fuels. There is no explicit obligation in the Market Rules or the Power System Operation Procedure: Facility Outages to request/report outages that limit the ability of a Scheduled Generator to operate using one of its fuels. In terms of the provision of sent out energy (the service used to determine Capacity Cost Refunds), it is questionable whether this situation qualifies as an outage at all. More generally, the Market Rules lack clarity on the nature and extent of a Market Generator's obligations to ensure that its Facility can operate on the fuel used for its certification, what (if anything) should occur if these obligations are not met, and the implications for outage scheduling and Reserve Capacity Testing. (See section 7.2.2.5 of the Final Rule Change Report for RC 2013 15.)	The MAC agreed that this issue should be placed on hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).	
59	MAC October 2019	 Ancillary Service outage scheduling anomalies Currently Registered Facilities that provide Ancillary Services under an Ancillary Service Contract must be included on the Equipment List. This creates the following potential anomalies: some Ancillary Service Contracts may include outage reporting provisions that are specific to the service and 	The MAC agreed that this issue should be placed on hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).	



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		Table 4 – Issues on Hold	
ld	Submitter/Date	Issue	Urgency and Status
		 may differ from the standard outage scheduling provisions for Equipment List Facilities; Market Participants are not required to schedule outages in relation to the availability of their LFAS Facilities to provide LFAS; Synergy is not required to schedule outages in relation to the availability of its Facilities to provide uncontracted Ancillary Services; and a contracted Ancillary Service may not always be provided by a Registered Facility. A review of the outage scheduling requirements relating to Ancillary Services may be warranted to resolve any anomalies and ensure that the obligations on Rule Participants to schedule outages for Ancillary Services are appropriate and consistent. (See section 7.2.2.5 of the Final Rule Change Report for RC_2013_15.) 	
60	MAC October 2019	Outage scheduling obligations for Interruptible Loads The Market Rules require all Registered Facilities that are subject to an Ancillary Service Contract to be included on the Equipment List. This includes the Interruptible Loads that are used to provide Spinning Reserve Service. However, the Market Rules do not explicitly state who is responsible for outage scheduling for Interruptible Loads. This is a problem because the counterparty to an Interruptible Load Ancillary Service Contract may be an Ancillary Service	The MAC agreed that this issue should be placed on hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).



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		Table 4 – Issues on Hold	
ld	Submitter/Date	Issue	Urgency and Status
		Provider, and not the Market Customer (usually a retailer) to whom the Interruptible Load is registered. An Ancillary Service Provider is not subject to obligations placed on a 'Market Participant or Network Operator', while the retailer for an Interruptible Load may not have any involvement with the Interruptible Load arrangement or the management of outages for that Load. (See section 7.2.3.1 of the Final Rule Change Report for RC_2013_15.)	
61	MAC October 2019	Direction of Self-Scheduling Outage Facilities An apparent conflict exists in the Market Rules between clauses that appear to allow System Management to reject or recall Planned Outages of Self-Scheduling Outage Facilities (e.g. clauses 3.4.3(a), 3.4.3(b), 3.4.4 and 3.5.5(c)) and clauses that appear to exempt Planned Outages of Self-Scheduling Outage Facilities from rejection or recall, such as: • clause 3.18.2A, which explicitly exempts Self-Scheduling Outage Facilities from obligations under section 3.20; • clause 3.19.5, which allows System Management to reject an approved Scheduled Outage or Opportunistic Maintenance but fails to mention Planned Outages of Self-Scheduling Outage Facilities (which are neither Scheduled Outages nor Opportunistic Maintenance); and • clause 3.19.6(d), which sets out a priority order for System Management to consider when it determines which previously approved Planned Outage to reject but	The MAC agreed that this issue should be placed on hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).



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		Table 4 – Issues on Hold	
ld	Submitter/Date	Issue	Urgency and Status
		does not include any reference to Planned Outages of Self-Scheduling Outage Facilities. (See section 7.2.3.2 of the Final Rule Change Report for RC_2013_15.)	
62	MAC October 2019	 Outage scheduling obligations for non-intermittent Non-Scheduled Generators Under the Market Rules: a non-intermittent generation system with a rated capacity between 0.2 MW and 10 MW may be registered as a Non-Scheduled Generator; and a non-intermittent generation system with a rated capacity less than 0.2 MW can only be registered as a Non-Scheduled Generator. To date, no non-intermittent generation systems have been registered as Non-Scheduled Generators. However, if a non-intermittent Non-Scheduled Generator was registered it would be able to apply for Capacity Credits, and if assigned Capacity Credits would also be assigned a non-zero Reserve Capacity Obligation Quantity (RCOQ). While this would make the Non-Scheduled Generator subject to the same RCOQ-related Scheduling Day obligations as a Scheduled Generator, the Non-Scheduled Generator's Balancing Market obligations are more uncertain and were not considered in the development of RC_2013_15. The Balancing Submissions for a Non-Scheduled Generator comprise a single Balancing Price-Quantity Pair with a MW 	The MAC agreed that this issue should be placed on hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).



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		Table 4 – Issues on Hold	
ld	Submitter/Date	Issue	Urgency and Status
		quantity equal to the Market Generator's "best estimate of the Facility's output at the end of the Trading Interval". There is no clear obligation to make the Facility's RCOQ available for dispatch or to report an outage for capacity not made available, because new section 7A.2A, which will clarify these obligations for Scheduled Generators, does not apply to Non-Scheduled Generators.	
		The need to cater for non-intermittent, Non-Scheduled Generators also affects the determination of capacity-adjusted outage quantities and outage rates and is likely to increase IT costs and the complexity of the Market Rules. (See section 7.2.3.4 of the Final Rule Change Report for RC_2013_15.)	

Notes:

• These are issues that the MAC will consider following some identified event. Issues on Hold will be reviewed by the MAC once the identified event has occurred, and then closed or moved to another sub-list.

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MARKET ADVISORY COMMITTEE MEETING, 8 June 2021

FOR NOTING

SUBJECT: UPDATE ON AEMO'S MARKET PROCEDURES

AGENDA ITEM: 7

1. PURPOSE

Provide a status update on the activities of the AEMO Procedure Change Working Group and AEMO Procedure Change Proposals.

2. AEMO PROCEDURE CHANGE WORKING GROUP (APCWG)

	Most recent meeting	Next meeting
Date	30 November 2020	TBC
Market Procedures for discussion	Market Procedure: Settlements (consequential changes required in relation to RC_2019_04: Administrative Improvements to Settlement).	TBC
	Market Procedure: Facility Registration, De-registration and Transfer (minor administrative changes and formatting improvements).	

3. AEMO PROCEDURE CHANGE PROPOSALS

The status of AEMO Procedure Change Proposals is described below, current as at 8 June 2021. Changes since the previous MAC meeting are in red text. A procedure change is removed from this report after its commencement has been reported or a decision has been taken not to proceed with a potential Procedure Change Proposal.

ID	Summary of changes	Status	Next steps	Date
No Procedure Changes Proposed	-	-	-	-



Agenda Item 8(a): Overview of Rule Change Proposals (as at 1 June 2021)

Meeting 2021 06 08

- Changes to the report since the previous Market Advisory Committee (MAC) meeting are shown in red font.
- The next steps and the timing for the next steps are provided for Rule Change Proposals that are currently being actively progressed by the Rule Change Panel (**Panel**) or the Minister.

Indicative Rule Change Panel Activity Until the Next MAC Meeting

Reference	Title	Events	Indicative Timing
RC_2019_03	Method used for the assignment of Certified Reserve Capacity to Intermittent Generators	Stakeholders are invited to raise any further questions or comments they have regarding the Draft Rule Change Proposal at this MAC meeting.	08/06/2021
		Publication of Final Rule Change Report ¹	17/06/2021

Rule Change Proposals Commenced since the Report presented at the last MAC Meeting

Reference	Submitted	Proponent	Title	Commenced
None				

Rule Change Proposals Awaiting Commencement

Reference	Submitted	Proponent	Title	Commencement
RC_2014_03	27/11/2014	IMO	Administrative Improvements to the Outage Process	29/06/2021

Publication of the Final Rule Change Report for RC_2019_03 will likely be extended by 5-7 Business Days.



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Rule Change Proposals Rejected since Report presented at the last MAC Meeting

Re	eference	Submitted	Proponent	Title	Rejected
None					

Rule Change Proposals Awaiting Approval by the Minister

Reference	Submitted	Proponent	Title	Approval Due Date
None				

Formally Submitted Rule Change Proposals

Reference	Submitted	Proponent	Title	Urgency	Next Step	Date	
Fast Track R	Fast Track Rule Change Proposals with Consultation Period Closed						
None							
Fast Track R	ule Change F	Proposals with Co	nsultation Period Open				
None							
Standard Rul	e Change Pr	oposals with Sec	ond Submission Period Closed				
RC_2019_03	17/12/2020	ERA	Method used for the assignment of Certified Reserve Capacity to Intermittent Generators	High	Publication of Final Rule Change Report	17/06/2021	
Standard Rule Change Proposals with Second Submission Period Open							
None							



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Reference	Submitted	Proponent	Title	Urgency	Next Step	Date
Standard Rul	Standard Rule Change Proposals with First Submission Period Closed ²					
RC_2014_05	02/12/2014	IMO	Reduced Frequency of the Review of the Energy Price Limits and the Maximum Reserve Capacity Price	Medium	Publication of Draft Rule Change Report	30/06/2021
RC_2018_03	01/03/2018	Collgar Wind Farm	Capacity Credit Allocation Methodology for Intermittent Generators	Medium	Publication of Draft Rule Change Report	30/06/2021
RC_2019_01	21/06/2019	Enel X	The Relevant Demand calculation	Medium	Publication of Draft Rule Change Report	30/06/2021
Standard Rule Change Proposals with the First Submission Period Open						

Pre-Rule Change Proposals

Reference	Proponent	Description	Next Step	Date
RC_2020_04	Panel	Balancing Facility Loss Factor Adjustment	Consult with the MAC on the Pre-Rule Change Proposal	TBD
TBD	Perth Energy	Issues with Reserve Capacity Testing	Submit Pre-Rule Change Proposal	TBD

The Panel will not progress RC_2014_05, RC_2018_03 and RC_2019_01 before the Panel is abolished on 30/06/2021, so responsibility to progress these Rule Change Proposals will be transferred to the Coordinator of Energy (**Coordinator**) on 01/07/2021. The Panel will extend the deadlines for the Draft Rule Change Reports for these three Rule Change Proposals to 31/12/2021 to give the Coordinator sufficient time to consider these proposals.



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Rule Changes Made by the Minister

Gazette	Date	Title	Commencement
20201/17	18/01/2021	Wholesale Electricity Market Amendment (Governance) Rules 2021	 Schedule A commenced on 01/02/2021 Schedule B will commence on 01/07/2021 Schedule C will commence immediately after the commencement of the Amending Rules in clauses 50 and 62 of Schedule C of the Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020
2020/214	24/12/2020	Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020	 Schedule A commenced on 01/01/2021 Schedule B commenced on 01/02/2021 Schedule C will commence at a time specified by the Minister in a notice published in the Gazette: The Amending Rules specified in Part 1 of the notice published on 29/01/2021 in Gazette 2021/20 commenced on 01/02/2021 The Amending Rules specified in Part 2 of the notice published on 29/01/2021 in Gazette 2021/20 will commence on 01/10/2021
2020/196	24/11/2020	Wholesale Electricity Market Amendment (Tranche 1 Amendments) Rules 2020	 Schedule A commenced on 25/11/2020 Schedule B, Part 1 commenced on 01/01/2021 Schedule B, Part 2 will commence on 01/02/2021 Schedule C will commence on 01/10/2021
2020/108	26/06/2020	Wholesale Electricity Market Amendment (Technical Rules Change Management) Rules 2020	The Amending Rules commenced on 01/01/2021
2020/24	21/02/2020	Wholesale Electricity Market Amendment (Reserve Capacity Pricing Reforms) Rules 2019	 The first tranche commenced 22/02/2020 The second tranche will commence on 01/10/2021

