

Meeting Agenda

Meeting Title: Market Advisory Committee

Date: Tuesday 27 April 2021

Time: 9:30 AM – 11:15 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 close of business on Friday 23 April 2021.

RCP Support will then send an invite to all of the registered attendees on Monday 26 April 2021 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_02_02 | Chair | 5 min |
| 4 | Action Items | Chair | 5 min |
| 5 | MAC WEM Rules Issues List | Chair | 15 min |
| 6 | Update on WA Government Reforms (no paper) | ETIU | 15 min |
| 7 | AEMO Procedure Change Working Group | AEMO | 5 min |
| 8 | Rule Changes | | |
| | (a) Overview of Rule Change Proposals | Chair | 5 min |
| 9 | Part 2 discussion on amending market rules intended to incentivise the availability of generators | ERA | 45 min |
| 10 | General Business | Chair | 5 min |

| Item | Item | Responsibility | Duration |
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Next scheduled meeting: 8 June 2021.

The Rule Change Panel plans to convene one or two MAC workshops in early May 2021 to review the Draft Rule Change Report for RC_2019_03. Market Participants have been contacted and RCP Support will provide an update on the timing of the workshop(s) as soon as possible.

Please note, this meeting will be recorded.

Minutes

| | |
|-----------------------|--|
| Meeting Title: | Market Advisory Committee (MAC) |
| Date: | 2 February 2021 |
| Time: | 9:30 AM – 11:35 AM |
| Location: | Online via Microsoft Teams |

| Attendees | Class | Comment |
|------------------|--|--------------------------------|
| Stephen Eliot | Chair | |
| Matthew Martin | Small-Use Consumer Representative | |
| Martin Maticka | Australian Energy Market Operator (AEMO) | |
| Dean Sharafi | AEMO | |
| Sara O'Connor | Economic Regulation Authority (ERA) Observer | |
| Dora Guzeleva | Minister's Appointee – Observer | Proxy for Kate Ryan |
| Jo-Anne Chan | Synergy | |
| Jacinda Papps | Market Generators | Absent 10:00 AM to 10:35 AM |
| Wendy Ng | Market Generators | |
| Tom Froad | Market Generators | |
| Patrick Peake | Market Customers | |
| Geoff Gaston | Market Customers | |
| Timothy Edwards | Market Customers | |
| Peter Huxtable | Contestable Customers | |
| Zahra Jabiri | Network Operator | |

| Also in Attendance | From | Comment |
|---------------------------|----------------------------------|--------------------------|
| Richard Cheng | ERA | Presenter |
| Aden Barker | Energy Policy WA (EPWA) | Presenter To 10:35 AM |
| Jenny Laidlaw | RCP Support | Minutes |
| Adnan Hayat | RCP Support | Observer |
| Laura Koziol | RCP Support | Observer |

| Also in Attendance | From | Comment |
|---------------------------|--|----------------|
| Sandra Ng Wing Lit | RCP Support | Observer |
| Matt Shahnazari | ERA | Observer |
| Emma Forrest | ERA | Observer |
| Julian Fairhall | ERA | Observer |
| Manuel Arapis | ERA | Observer |
| Irina Stankov | ERA | Observer |
| Shibli Khan | ERA | Observer |
| Erdem Oz | ERA | Observer |
| Donna Todesco | ERA | Observer |
| Aditi Varma | EPWA | Observer |
| Stephen Edwell | Energy Transformation Taskforce (ETT) | Observer |
| Ian Porter | Sustainable Energy Now (SEN) | Observer |
| Noel Schubert | Independent | Observer |
| Erin Stone | Point Global | Observer |
| Oscar Carlberg | Alinta Energy | Observer |
| Ryan Emanuel | AEMO | Observer |

| Apologies | From | Comment |
|------------------|---------------------------------|----------------|
| Kate Ryan | Minister's Appointee – Observer | |
| Daniel Kurz | Market Generators | |

| Item | Subject | Action |
|-------------|---|---------------|
| 1 | Welcome The Chair opened the meeting at 9:30 AM and welcomed members and observers to the 2 February 2021 MAC meeting. | |
| 2 | Meeting Apologies/Attendance The Chair noted the attendance as listed above. | |
| 3 | Minutes of Meeting 2020_11_17 Draft minutes of the MAC meeting held on 17 November 2020 were circulated on 2 December 2020. The MAC accepted the minutes as a true and accurate record of the meeting. | |

| Item | Subject | Action |
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| | Action: RCP Support to publish the minutes of the 17 November 2020 MAC meeting on the Rule Change Panel's (Panel) website as final. | RCP Support |
| 4 | Action Items | |
| | There were no outstanding action items. | |
| 5 | MAC Market Rules Issues List (Issues List) | |
| | The Chair noted that RCP Support had decided to delay the intended review of the Issues List until the next MAC meeting due to competing priorities. | |
| | Attendees did not propose any changes to the Issues List. | |
| 6 | Update on WA Government Reforms | |
| | Ms Dora Guzeleva provided the following updates: | |
| | <ul style="list-style-type: none"> • The <i>Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020 (T2&3 Amending Rules)</i>, which implement the new security constrained economic dispatch market design and changes to the Reserve Capacity Mechanism (RCM), were Gazetted on 24 December 2020. The first sections of the T2&3 Amending Rules commenced on 1 January 2021 and provide for the deferral of the 2021 and 2022 Reserve Capacity Cycles and require AEMO to publish the revised timetables for those Reserve Capacity Cycles by 1 March 2021. • The bulk of the T2&3 Amending Rules will commence on 1 October 2022. However, some parts will commence progressively before that date to enable AEMO to undertake certain activities, predominantly relating to the new RCM design. The Minister will publish Gazette notices for these commencements progressively. • A Gazette notice was published on 29 January 2021 to commence changes relating to the first set of activities for the 2021 Reserve Capacity Cycle. Some of the changes commenced on 1 February 2021 and the remainder will commence on 1 July 2021. • The new Generator Performance Standards (GPS) arrangements commenced on 1 February 2021. • A package of changes to implement the new governance arrangements was published on 22 January 2021. The package includes amendments to the <i>Electricity Industry (Wholesale Electricity Market) Regulations 2004</i> and the | |

| Item | Subject | Action |
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| | <p><i>Gas Services Information Regulations 2012</i>, the abolition of the <i>Energy Industry (Rule Change Panel) Regulations 2016</i>, and amendments to the WEM Rules and Gas Services Information Rules.</p> <p>The changes provide for the transfer of rule-making and other market development functions to the Coordinator, who has also been assigned responsibility for future Whole of System Plans (WOSPs). The Coordinator will assume these functions from 1 July 2021.</p> <p>EPWA thanked stakeholders for their input to the consultation process. EPWA had published the 11 submissions received on the governance changes and its responses to those submissions; and had made several enhancements to the process for rule changes undertaken by the Coordinator in response to submissions.</p> <ul style="list-style-type: none"> • The ETT would continue to meet monthly until the end of May 2021, to consider matters including (but not limited to) the market information provisions in the WEM Rules, the market power mitigation strategy review, Non-Cooptimised Essential System Services arrangements and the power system security and reliability standards. <p>It was expected that the implementation of some ETT policy decisions will be made after the ETT terminates in May 2021, using the Minister’s rule-making powers.</p> | |
| | <p>Mr Aden Barker provided the following updates:</p> | |
| | <ul style="list-style-type: none"> • In relation to the GPS framework, the Energy Transformation Implementation Unit (ETIU) was supporting the Coordinator in the appointment of a technical advisory panel and the GPS arbitrator. The appointments must be in place by April 2021. ETIU had received several very good applications and would provide advice to the Coordinator on the appointments over the coming two weeks. • ETIU held a workshop on System Restart on 1 February 2021. The meeting was attended by about 30 people, and discussed additional changes to the System Restart provisions that are expected to be included in the next package of Amending Rules made after the State election. • ETIU was in the process of finalising a ‘companion version’ of the WEM Rules that incorporates the Amending Rules made by the Minister to date and provides explanatory notes and information on commencement dates. ETIU intended to provide the companion version to RCP Support for publication on the Panel’s website. | |

| Item | Subject | Action |
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| 7(a) | <p>AEMO Procedure Change Working Group Update</p> <p>Mr Martin Maticka noted that AEMO published two Procedure Change Proposals on 21 January 2021:</p> <ul style="list-style-type: none"> • AEPC_2020_07, which proposed changes to the WEM Procedure: Settlement arising from Rule Change Proposal RC_2019_04 (Administrative Improvements to Settlements) along with some other administrative amendments; and • AEPC_2020_03, which proposed some minor administrative changes to the WEM Procedure: Facility Registration, De-registration and Transfer. <p>The consultation periods for AEPC_2020_07 and AEPC_2020_03 closed at 5:00 PM on 19 February 2021. AEMO was happy to provide interested stakeholders with individual briefings on the Procedure Change Proposals.</p> | |
| 8(a) | <p>Overview of Rule Change Proposals</p> <p>RC_2014_03 (Administrative Improvements to the Outage Process):</p> <p>Ms Jenny Laidlaw noted that RCP Support was preparing the Final Rule Change Report for RC_2014_03. As part of that process, RCP Support was taking into account the submissions received in the second submission period, and particularly the cost estimates provided by Synergy, as well as some recent statements by AEMO relating to its resourcing and preparation for the WEM Reforms.</p> <p>Ms Laidlaw advised that RCP Support had discussed some options with AEMO and had requested some additional information. RCP Support received some information on 29 January 2021, but had found the information to be confusing and so had sought further clarification from AEMO. RCP Support had not yet received the requested clarification or an estimated time for its provision.</p> <p>To facilitate the completion of the long overdue Final Rule Change Report, RCP Support intended to proceed on the basis of a number of assumptions, and was counting on AEMO and/or Synergy to advise RCP Support within the next few days if any of those assumptions were incorrect. Ms Laidlaw provided a summary of RCP Support's assumptions.</p> <p>Ms Laidlaw noted that, if AEMO was unable to provide updated cost estimates in time, particularly for the proposed changes to remove constrained off compensation for Scheduled Generators suffering Forced Outages or Consequential Outages, RCP Support would need to make its recommendations to the</p> | |

| Item | Subject | Action |
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| | <p>Rule Change Panel using conservative cost estimates based on previous advice from AEMO.</p> <p>In response to requests from Ms Jo-Anne Chan and Ms Wendy Ng, the Chair agreed to email the list of assumptions to AEMO and Synergy for comment and to other MAC members for information.</p> <p>Mr Dean Sharafi commented that the latest drafting provided to AEMO by RCP Support was significantly different from the drafting in the Draft Rule Change Report, and that AEMO was assessing the impact of the revised proposal. Ms Laidlaw replied that, given the timing pressures, RCP Support had requested several times to meet with AEMO's technical experts to discuss the drafting changes, because it was concerned about AEMO's perception that the changes required a new and complex IT quote.</p> <p>The Chair noted that the Rule Change Panel's objective was to complete the Rule Change Proposal by the scheduled date (26 February 2021) so that RCP Support resources could be diverted to other urgent Rule Change Proposals, including Rule Change Proposal RC_2019_03 (Method used for the assignment of Certified Reserve Capacity to Intermittent Generators).</p> <p>Ms Ng considered that, given the 1 October 2022 deadline for the WEM Reforms, any changes that diverted Rule Participant resources away from the WEM Reform program could be quite distracting. Ms Laidlaw replied that RCP Support was aware of the risks of diverting resources away from the WEM Reform program and was looking to avoid IT changes.</p> <p>RC_2019_01 (The Relevant Demand calculation):</p> <p>The Chair noted that RCP Support had developed a proposal on how to analyse RC_2019_01 and develop a straw man for MAC discussion. AEMO was generally supportive of the proposed approach and had started to gather data for the required analyses.</p> <p>However, work on RC_2019_01 had been delayed due to competing priorities. While RCP Support would continue to work on the proposal to the extent that resources were available, it expected that the proposal would need to be transferred to the Coordinator for completion.</p> <p>Mr Peter Huxtable expressed concern about the continuing delay in progressing RC_2019_01, but understood the reasons for the delay.</p> | |

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| | <p>RC_2019_03 (Method used for the assignment of Certified Reserve Capacity to Intermittent Generators):</p> | |
| | <p>The Chair noted that the ERA submitted RC_2019_03 on 17 December 2020. The first submission period was extended following a request from AEMO and would now close on 11 February 2021.</p> | |
| | <p>The Chair noted that the timeline for the Panel to make a final decision on RC_2019_03 before the transition of rule-making authority to the Coordinator was very tight. RCP Support, with support from AEMO, had already commenced its analysis of the proposal.</p> | |
| | <p>The Chair asked stakeholders to advise him if they needed a further extension, but noted that any extension would make the Panel's timelines tighter. Ms Laura Koziol noted that it would be helpful if stakeholders could provide their first period submissions as early as possible.</p> | |
| | <p>The following points were discussed:</p> | |
| | <ul style="list-style-type: none"> Mr Ian Porter noted that the only reference to emissions in the Rule Change Proposal was in a reference to Wholesale Market Objective (c). Mr Porter considered it strange that there was only one reference to emissions in the Wholesale Market Objectives and no other references to emissions in the Rule Change Proposal. | |
| | <p>Mr Porter raised a concern that the initial WOSP placed an emphasis on solar technologies that was inconsistent with the outcomes of SEN's modelling, which indicated that a wind-dominated system would be necessary to reduce the need for storage and produce the best reliability outcomes. SEN considered that technology neutrality was an incorrect approach and that different technologies were suitable for different purposes. Mr Porter suggested that this concept should be introduced into the understanding of this rule-making procedure.</p> | |
| | <p>Mr Porter also proposed that AEMO should publish information about the real-time emissions impacts of WEM dispatch.</p> | |
| | <p>The Chair noted that the Wholesale Market Objectives were prescribed in the <i>Electricity Industry Act 2004</i>, and could only be amended by an act of Parliament. Mr Barker noted that changes to the Wholesale Market Objectives were considered as part of the WEM Reform Program about two years ago (before the formation of the ETT). However, it was noted that some consideration of environmental factors was already implied in the Wholesale Market Objectives,</p> | |

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| | <p>and that the legislative framework would require an act of Parliament to change. The ETT had generally sought to make changes within the existing regulatory framework, as opposed to relying on Parliament to make new legislation, which was not to say that there might not be such legislative changes in future.</p> <p>The Chair noted that the decision criteria for Rule Change Proposals were quite broad and included the Wholesale Market Objectives, cost, practicality, policy directions from the Minister, and advice from the MAC and submissions. The Chair questioned whether emissions costs might be considered within the scope of the decision criteria, and whether MAC members thought this was something that needed to be further discussed at some stage.</p> <p>After some discussion, the MAC agreed to consider whether to include the issue in the Issues List at the next MAC meeting.</p> <ul style="list-style-type: none"> Mr Noel Schubert noted that he had suggested to the ERA and EPWA that future WOSP studies conduct analyses of options from the different perspectives that are covered in the California Standard Practice Manual for Evaluation of Demand Side Options (Manual). The Manual set out five different perspectives from which options can be evaluated. The total resource cost perspective had an extension to a societal cost, which included externalities like emissions. Mr Schubert considered that the Manual could also be used in the assessment of Rule Change Proposals. <p>The Chair and Mr Schubert agreed to discuss the Manual further off-line and for Mr Schubert to send the Chair a copy of the email he had sent to the ERA and EPWA.</p> | |
| | <p>Action: RCP Support to email the list of assumptions being used by RCP Support to prepare the Final Rule Change Report for RC_2014_03 (Administrative Improvements to the Outage Process) to AEMO and Synergy for comment and to other MAC members for information.</p> | RCP Support |
| | <p>Action: RCP Support 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.</p> | RCP Support |

| Item | Subject | Action |
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| 9(a) | Review of the Minimum STEM Price | |
| | <p>Mr Richard Cheng provided an overview of the ERA's upcoming review of the Minimum STEM Price. A copy of the ERA's presentation is available in the meeting papers.</p> | |
| 9(b) | Findings and Recommendations from the Generator Availability Review¹ | |
| | <p>Mr Cheng gave a presentation summarising the final report and recommendations of the ERA's 2020 review of two WEM Rules intended to incentivise the availability of generators. The presentation also formed the start of the ERA's consultation with the MAC regarding the development of a Rule Change Proposal to implement the review's recommendations. A copy of the ERA's presentation is available in the meeting papers.</p> <p>The following points were discussed:</p> <ul style="list-style-type: none"> Ms Ng considered that the point of the RCM was to ensure that sufficient capacity was available to meet the system peak, particularly over the summer period. Ms Ng suggested that it may not be appropriate to apply an equivalent forced outage rate that was determined over a full year to an assessment of availability during peak periods, and asked whether the ERA had compared the Forced Outage rates for the summer period with the rates for the rest of the year. <p>Ms Ng considered that in her experience most units were available during peak times, so to say that the availability of generators during peak periods was an issue that needed to be dealt with was an overstatement.</p> <p>Mr Oscar Carlberg and Ms Chan agreed with Ms Ng's comments.</p> <p>Mr Cheng noted that, while the current Electricity Statement of Opportunities indicated that the WEM had an excess of Reserve Capacity (around 6-8%), the ERA was concerned about whether enough capacity was actually available to meet the Planning Criterion in summer stress periods, given the potential impact of Forced Outages.</p> <p>Dr Matt Shahnazari added that the WEM had probably been fortunate not to have observed capacity shortages in the past (e.g. because it had never experienced very high system demand). Dr Shahnazari did not think the lack of</p> | |

¹ Note that this agenda item was moved to the end of the meeting at the request of one MAC member.

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| | <p>capacity issues in the past was proof that no problem existed.</p> <ul style="list-style-type: none"> Mrs Jacinda Papps considered there was a need to consider investor certainty and what the ERA's proposal would mean for investor decisions made in the past. Mrs Papps suggested that the ERA was looking at the issue from a very academic and probabilistic side, but was not necessarily taking into account the effect of the proposed changes on those who had invested in the WEM. <p>Dr Shahnazari noted that the ERA's proposal was current practice in other capacity markets around the world.</p> <ul style="list-style-type: none"> Mrs Papps expressed concern that the ERA was proposing to reform part of the RCM in isolation. Given the significance of the proposed change to the accreditation processes, Alinta believed the ERA would also need to review other aspects of the RCM, such as whether the Benchmark Reserve Capacity Price (BRCP), refund methodology and Reserve Capacity testing arrangements were still appropriate. <p>Ms Ng agreed with Mrs Papps that the flow-on impacts of the proposed changes on the broader RCM needed to be considered.</p> <p>Dr Shahnazari replied that the ERA had in fact considered different elements of the RCM (including the refund mechanism, the Planning Criterion, the reserve margin and outage planning) and would continue to do so as part of the development of the Rule Change Proposal.</p> <p>Dr Shahnazari agreed that many investors had entered the market with an understanding of the existing market mechanisms. However, Dr Shahnazari suggested the reliability of the system was also a consideration. The Network Access Quantity (NAQ) mechanism would soon commence and there was a need to ensure that generators that contribute to the reliability of the system are compensated accordingly. A generator that was not performing in terms of contributing to the reliability of the system should lose NAQ.</p> <ul style="list-style-type: none"> The Chair sought clarification from Dr Shahnazari on whether the ERA's Rule Change Proposal would extend beyond the two clauses that were the subject of its review to propose broader changes to the RCM. <p>Dr Shahnazari replied that the ERA was currently liaising with EPWA on this question. In developing the Rule Change Proposal, the ERA would have consideration for all the</p> | |

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| | <p>elements of the RCM and how the Rule Change Proposal might interfere with or influence some aspects of the RCM. However, the ERA did not yet know whether it had the scope to propose revisions to all elements of the RCM. Nevertheless, the ERA considered that it would be appropriate for EPWA to consider the full Rule Change Proposal, given the findings of the ERA's review.</p> | |
| | <ul style="list-style-type: none"> Ms Laidlaw agreed with Mrs Papps and Ms Ng that the proposal affected many different aspects of the RCM, including the Planning Criterion, Reserve Capacity Obligations, capacity refund mechanisms, outage planning and reporting, the BRCP (because generators would receive fewer Capacity Credits but have the same fixed costs), and the NAQ regime (in terms of both changes to the NAQ calculations and the long-term impacts on Market Participants of temporary reductions in Certified Reserve Capacity (CRC)). | |
| | <p>While RCP Support had not undertaken any assessment of the net benefits of the proposal, Ms Laidlaw considered that given the magnitude of the changes, it would be very important to have a solid business case for the change. Ms Laidlaw suggested that identification of the material benefits of the changes should be a priority because the costs of those changes would be material.</p> | |
| | <p>Mr Carlberg, Mrs Papps, Ms Ng and Ms Chan agreed with Ms Laidlaw's comments.</p> | |
| | <ul style="list-style-type: none"> Mr Timothy Edwards noted that the issues being considered were complex and very important to many of Metro Power's customers. Mr Sharafi noted that AEMO intended to give a presentation at the next meeting of the WA Electricity Consultative Forum (WAECF) about a period of low system reserve on 8 January 2021. While not specifically related to the ERA's Rule Change Proposal, the presentation also dealt with the concepts of reliability and capacity, and whether previously held assumptions about WEM reliability were still valid. Mr Carlberg considered that the use of a Forced Outage rate to discount generators' CRC would discriminate against generators that operated more often and not provide an accurate representation of what was likely to occur in future. Mr Carlberg noted that frequently operating generators already had the most incentive to be available and were more exposed to the risk of Capacity Cost Refunds. | |

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| | <p>Ms Ng agreed with Mr Carlberg and noted that the biggest impact of the proposal would be on Scheduled Generators. Ms Ng questioned how many facilities would be likely to enter the market given that the RCM rules may change so drastically, and suggested that, if the idea was to ensure that there is enough capacity to meet the system peak, it might be necessary to certify even more capacity, which meant even more cost for consumers.</p> | |
| | <ul style="list-style-type: none"> Mr Patrick Peake recalled that the designers of the RCM considered two options to ensure consistency between the Reserve Capacity Price, the Reserve Capacity Target and the certification process: either certification was based on the absolute capacity of the generator, or else its Forced Outages could be taken into account. However, it was clear that all the components of the RCM needed to be consistent. | |
| | <p>Mr Peake thought that the designers decided that it was much easier to provide coverage for Forced Outages by simply adding a reserve margin into the Reserve Capacity Target. Otherwise, it would be necessary to determine the Forced Outage rate of each generator at the time of system peak; then modify the Reserve Capacity Target to account for the possibility of an extra generator failing; and then work out how to calculate the Reserve Capacity Price so that generators continued to receive the amount of money they needed to operate. Mr Peake did not consider that one aspect of the current arrangements could be changed without considering all the other aspects.</p> | |
| | <p>Mr Peake also observed that the Reserve Capacity Price had greatly reduced since market start, and questioned who in future would be willing to build the capacity that would eventually be needed to replace the aging coal units. Mr Peake considered that investors would not be interested in investing in the market if there was even the slightest chance of totally losing their investment (e.g. through AEMO reducing the CRC of facilities).</p> | |
| | <p>Mr Peake considered that what was needed was a full review of the RCM going back to the basic principle, which was to ensure system reliability, not minimise customer costs. Mr Carlberg, Ms Ng and Mr Geoff Gaston all agreed with Mr Peake's comments.</p> | |
| | <ul style="list-style-type: none"> Mrs Papps did not agree with the progression of the Rule Change Proposal until a longer, more detailed discussion had been held at the MAC. Mrs Papps also suggested that consideration should be given to all the other reform work in | |

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| | <p>progress. Ms Ng agreed with Mrs Papps about the progression of the Rule Change Proposal and the need for further MAC discussion.</p> <ul style="list-style-type: none"> • Ms Chan considered that the ERA's proposal could unfairly penalise facilities that suffer from one-off Forced Outages due to problems that are subsequently addressed. The Forced Outage would not be reflective of the future availability of the facility but could still affect its CRC or future NAQ. Mrs Papps and Ms Ng agreed with Ms Chan's concern. <p>The Chair noted that Mr Cheng was only part way through his presentation, but the meeting had run out of time. The MAC agreed to continue the presentation and discussion at the next MAC meeting on 16 March 2021.</p> | |
| 10 | <p>Increase in Spinning Reserve Requirement for Distributed PV Tripping</p> <p>Mr Sharafi gave a presentation on the need for additional Spinning Reserve due to the increased penetration of rooftop photovoltaic (PV) systems known as distributed PV (DPV). A copy of AEMO's presentation is available in the meeting papers.</p> <p>The following points were discussed:</p> <ul style="list-style-type: none"> • Mr Tom Frod asked what the mix of inverter types was in the WEM. Mr Sharafi replied that this was a difficult question because AEMO did not have visibility of what inverters had been installed or what standards they complied with. Mr Sharafi noted that one of the actions from the Distributed Energy Resources (DER) Roadmap was to create a DER Register, which ideally will allow AEMO to answer such questions and ensure that the relevant data is captured for future analysis. • Mr Peake asked whether AEMO knew the cost of the additional Spinning Reserve requirements, and how the additional cost would be tied back to the causer. <p>Mr Sharafi replied that the costs of Spinning Reserve were determined using the margin values mechanism. AEMO intended to work with the ERA, which was in the process of determining the margin values to apply for the 2021/22 Financial Year, to provide information about the change so that the ERA had proper inputs to its models. AEMO had also recorded details of when it had needed to use extra Synergy machines to provide additional Spinning Reserve and would provide that information to the ERA.</p> | |

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| | <p>The Chair suggested that tying the costs back to their causer was more challenging. Mr Sharafi agreed, considering that a number of different views existed about who was causing the problem. For example, the issue in the North Country would be resolved by the construction of another 330 kV line. It could also be considered that the DPV was responsible for the problem.</p> | |
| | <p>Mr Porter agreed that a lack of grid investment was a cause.</p> | |
| | <ul style="list-style-type: none"> • There was some discussion about whether the tripping of DPV following a trip of the North Country line, Yandin and Warradarge should be treated as a single credible contingency event (and accounted for when determining the Spinning Reserve requirements) or as separate contingency events. Mr Sharafi confirmed that, based on recent experience, AEMO considered that these scenarios should be viewed as a single, credible contingency. • Mr Peake questioned whether, with so much DPV, there was a need to review the effectiveness of the Under Frequency Load Shedding (UFLS) arrangements. Mr Sharafi replied that AEMO and Western Power had been working together for the previous 18 months on how to improve the effectiveness of the UFLS scheme. As a result of this work some relays had been replaced to make the UFLS more dynamic and ensure that the disconnection of a feeder was increasing (and not further reducing) the system frequency. | |
| | <p>Mr Sharafi indicated that AEMO could provide more information about the UFLS investigations being undertaken by AEMO and Western Power at a future meeting of the MAC or the WAECF. The Chair noted that he was happy to include a presentation on the UFLS work on the agenda for a future MAC meeting.</p> | |
| | <ul style="list-style-type: none"> • Dr Shahnazari suggested that finding and eliminating the cause of the problem might provide a lower cost solution than incurring costs to manage the risk. • Mr Porter questioned whether, to mitigate the cost of Spinning Reserve, there had been a cost analysis into using Demand Side Management as an alternative. Mr Sharafi replied that the problem was very recent and AEMO had not had time to consider different options. • Mr Sharafi noted that AEMO was also working with Western Power to look at the holistic range of emerging challenges and issues that the SWIS was going through. Once this | |

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| | <p>work had provided an understanding of how the range of issues could be dealt with, a technical economic analysis of the options will be undertaken. Mr Sharafi expected to be able to share more detail with the MAC in around a year's time.</p> <ul style="list-style-type: none"> Ms Guzeleva noted that there was an action in the DER Roadmap for AEMO and Western Power to review the UFLS arrangements as a result of increasing DER penetration. <p>The Chair asked if AEMO intended to provide another update to the MAC once it had given further thought to the questions raised by Mr Peake around costs and the allocation of costs. Mr Sharafi agreed and considered that the matter was something all MAC members needed to discuss going forward.</p> <p>Ms Chan was supportive of AEMO providing a further update to the MAC. Mr Peake considered that AEMO should not be under any pressure to provide a further update to the MAC. Mr Peake noted that the issue was a very large challenge for AEMO, but was confident about AEMO's ability to handle the issue and interested to hear more once AEMO reached some further conclusions.</p> | |

11 General Business

Update on Procedure Change Proposals:

The Chair noted that the Panel had approved the Procedure Change Proposals REPC_2020_01 (Changes to Market Procedure: Notices and Communications) and REPC_2020_02 (Changes to Market Procedure: Procedure Administration). The amended WEM Procedures commenced on 1 February 2021.

BRCP Working Group:

The MAC agreed to disband the BRCP Working Group as it was no longer required.

The meeting closed at 11:35 AM

Agenda Item 4: MAC Action Items

Meeting 2021_04_27

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| 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 |
|--------|--|----------------|-----------------|--|
| 1/2021 | RCP Support is to publish the minutes of the 17 November 2020 MAC meeting on the Rule Change Panel's (Panel) website as final. | RCP Support | 2021_02_02 | Closed The minutes were published on the Panel's website on 2 February 2021. |
| 2/2021 | RCP Support is to email the list of assumptions being used by RCP Support to prepare the Final Rule Change Report for RC_2014_03 (Administrative Improvements to the Outage Process) to AEMO and Synergy for comment and to other MAC members for information. | RCP Support | 2021_02_02 | Closed The assumptions were emailed on 3 February 2021. |

| 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 | Open This matter is discussed under Agenda Item 5 (MAC Market Rules Issues List Update). |

Agenda Item 5: MAC WEM Rules Issues List Update

Meeting 2021_04_27

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 red font, while issues that have been closed since the last publication are shaded in grey.

Recommendation:

RCP Support recommends that the MAC:

- note that there have been no updates to the Issues List since the MAC meeting on 20 October 2020;
- consider the potential new issue (see below);
- provide any further updates to existing issues; and
- indicate whether there are any new issues to be raised.

Potential New Issue:

Under Action 3/2021, the MAC is to consider whether a new issue should be added to the Issues List regarding whether emissions costs should be considered in the assessment of Rule Change Proposals (Proposal).

Based on the discussion at the 2 February 2021 MAC meeting regarding Action 3/2021, RCP Support is unclear about the nature of the discussion that is to be had. The discussion could be:

- (1) can/should the Rule Change Panel (Panel), and soon the Coordinator, promote the reduction of emissions when considering Proposals; or
- (2) can/should the Panel/Coordinator consider emissions costs when assessing a Proposal.

RCP Support is of the view that, to promote emissions reductions under the WEM Rules, the Panel/Coordinator would need explicit direction from Government to do so, which would likely require changes to the head of power for the Panel/Coordinator and to the Wholesale Market Objectives. If this is the intent, then RCP Support suggests that the matter should be raised directly with Energy Policy WA.

If the intent of this discussion is to consider whether the Panel/Coordinator can/should consider emissions costs along with any other costs in assessing Proposals, then the MAC should discuss the following:

- (1) The Wholesale Market Objectives are the main criteria that the Panel/Coordinator must consider in assessing a Proposal. The MAC should discuss whether consideration of emissions costs is already implicit in the Wholesale Market Objectives. That is, it could be argued that:

- Wholesale Market Objective (a)¹ requires the WEM Rules to promote ‘economically efficient’ production of electricity; and economic efficiency requires consideration of all costs associated with production, including emissions costs; and
- Wholesale Market Objective (c)² requires the WEM Rules to avoid discrimination against any technologies, including those that make use of renewable resources or reduce greenhouse gas emissions, so it would be discriminatory to fail to recognise that some technologies have emissions costs while others do not.

If the MAC agrees that the Wholesale Market Objectives should be interpreted as indicated above, then it may not be necessary to amend the Wholesale Market Objectives or WEM Rules to reflect that emissions costs should be considered in the assessment of Proposals.

- (2) If the MAC does not agree that consideration of emissions costs is implicit in the Wholesale Market Objectives, then the MAC should consider whether it should be made explicit in the WEM Rules that emissions costs should be considered in assessing a Proposal, and if so, in what respect.
- (a) If the MAC agrees that it should be made explicit in the WEM Rules that emissions costs should be explicitly considered in assessing a Proposal, then there appear to be two options to build this into the WEM Rules:
- (i) Changing the Wholesale Market Objectives:
The Wholesale Market Objectives are stated in clause 122(2) of the *Electricity Industry Act 2004*, so changing these objectives would require an act of Parliament.
 - (ii) Changing the WEM Rules:
Clause 2.4.3 of the WEM Rules indicates the matters that the Panel/Coordinator must have regard to in deciding whether to make Amending Rules.³ Clause 2.4.3 could be amended to specify that the Panel/Coordinator must consider emissions costs when deciding whether to make Amending Rules.

¹ Wholesale Market Objective (a) is:

to promote the economically efficient, safe and reliable production of electricity an electricity related services in the South West interconnected system;

² Wholesale Market Objective (c) is:

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;

³ The matters that the Panel must have regard to in considering a Proposal include:

- (a) any applicable statement of policy principles given to the Panel;
 - (b) the practicality and cost of implementing the Proposal;
 - (c) the views expressed in any submissions on the Proposal;
 - (d) the views expressed by the MAC where the MAC met to consider the Proposal; and
 - (e) any technical studies that the Panel considers are necessary to assist in assessing the Proposal.
- Clause 2.4.3 will be amended on 1 July 2021 to change references from the Panel to the Coordinator, and to add the following to the list of considerations:
- (aA) any advice provided by the MAC regarding the evolution or development of the WEM or the WEM Rules; and
 - (dA) whether the advice from the MAC reflects a consensus view or a majority view, and if the latter, any dissenting views.

- (b) The vast majority of the WEM Rules will have no impact on the level of emissions from the generation fleet in WA, so it is unclear how the Panel/Coordinator could/should consider emissions costs.

The MAC is asked to determine whether an issue should be added to the Issues List regarding whether emissions costs should be considered in the assessment of Rule Change Proposals, and if so, what is the nature of the issue.

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 yet commenced this review because it has instead focused its resources on finalising RC 2014 03 (Administrative Improvements to the Outage Process) and progressing RC 2019 03 (Method used for the assignment of Certified Reserve Capacity to Intermittent Generators). Resources permitting, RCP Support will commence this review and present recommendations at the 8 June 2021 MAC meeting regarding which issues have been addressed by the ETS and which remain outstanding.

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

Table 1 – Potential Rule Change Proposals

| Id | Submitter/Date | Issue | Urgency and Status |
|----|------------------------|--|--|
| 45 | AEMO May 2018 | <p>Transfer of responsibility for setting document retention requirements</p> <p>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.</p> | <p>Panel rating: Low</p> <p>MAC ratings: Low</p> <p>Status:</p> <p>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.</p> |
| 46 | AEMO May 2018 | <p>Transfer of responsibility for setting confidentiality statuses</p> <p>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.</p> | <p>Panel rating: Low</p> <p>MAC ratings: Low</p> <p>Status:</p> <p>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.</p> |
| 47 | AEMO September 2018 | <p>Market Procedure for conducting the Long Term PASA (clause 4.5.14)</p> <p>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.</p> <p>AEMO considers that its Market Procedure should not cover the ERA's review, and the ERA should be able to independently scope the</p> | <p>Panel rating: Low</p> <p>MAC ratings: Low</p> <p>Status:</p> <p>This issue has not been progressed.</p> |

Table 1 – Potential Rule Change Proposals

| Id | 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 | <p>Conflict between Relevant Level Methodology and the early and conditional certification of Intermittent Generators</p> <p>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.</p> | <p>Panel rating: TBD</p> <p>MAC ratings: Low</p> <p>Status:</p> <p>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).</p> <p>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:</p> <ul style="list-style-type: none"> 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]. |

Table 1 – Potential Rule Change Proposals

| Id | Submitter/Date | Issue | Urgency and Status |
|----|----------------|-------|---|
| | | | <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ 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. <p>AEMO also stated that:</p> <ul style="list-style-type: none"> • 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. <p>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</p> |

Table 1 – Potential Rule Change Proposals

| Id | Submitter/Date | Issue | Urgency and Status |
|----|---------------------------|---|--|
| | | | <p>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.</p> <p>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.</p> |
| 56 | Perth Energy July 2019 | <p>Issues with Reserve Capacity Testing</p> <ul style="list-style-type: none"> 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. There is a discrepancy between the number of Trading Intervals for self-testing vs. AEMO testing. 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. | <p>Panel rating: TBD</p> <p>MAC ratings: TBD</p> <p>Status:</p> <p>Perth Energy has indicated that it will develop a Pre-Rule Change Proposal for consideration by the MAC.</p> |

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.

Table 2 – Broader Issues

| Id | Submitter/Date | Issue | Urgency and Status |
|----|----------------------------------|---|--|
| 1 | Shane Cremin November 2017 | <p>IRCR calculations and capacity allocation</p> <p>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’.</p> | 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? | <p>To be considered in the preliminary reviews of behind-the-meter issues and the basis for allocation of Market Fees.</p> <p>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.</p> |
| 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. |

Table 2 – Broader Issues

| Id | 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 | <p>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.</p> <p>Therefore, the non-BTM Market Participants are subsidizing the BTM generation in the WEM. Subsidy does not promote efficient economic outcome.</p> <p>Rapid growth of BTM generation will only exacerbate this inefficiency if not promptly addressed.</p> <p>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.</p> <p>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.</p> <p>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.</p> | <p>To be considered in the preliminary reviews of behind-the-meter issues and the basis for allocation of Market Fees.</p> <p>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.</p> |

Table 2 – Broader Issues

| Id | Submitter/Date | Issue | Urgency and Status |
|----|--------------------------------|--|--|
| 23 | Bluewaters November 2017 | <p>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.</p> <p>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.</p> <p>Recommendations: to review the Market Fees structure including the cost recovery mechanism for a reform program.</p> <p>The cost saving from improved economic efficiency can be passed on to the end consumers, hence promoting the Wholesale Market Objectives.</p> | To be considered in the preliminary review of the basis for allocation of Market Fees. |
| 30 | Synergy November 2017 | <p>Reserve Capacity Mechanism</p> <p>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:</p> <ul style="list-style-type: none"> • 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. |

Table 2 – Broader Issues

| Id | Submitter/Date | Issue | Urgency and Status |
|----|-----------------------------------|---|--|
| | | <ul style="list-style-type: none"> assessment of thermal generation capacity. <p>The review will support Wholesale Market Objectives (a) and (d).</p> | |
| 35 | ERM Power November 2017 | <p>BTM generation and apportionment of Market Fees, ancillary services, etc.</p> <p>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.</p> | <p>To be considered in the preliminary reviews of behind-the-meter issues and the basis for allocation of Market Fees.</p> <p>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.</p> <p>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.</p> |
| 39 | Alinta Energy November 2017 | <p>Commissioning Test Process</p> <p>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.</p> <p>The Market Rules and PSOP require System Management to approve a Commissioning Test Plan or a revised Commissioning Test Plan by</p> | <p>To be considered in the preliminary review of the Commissioning Tests.</p> |

Table 2 – Broader Issues

| Id | Submitter/Date | Issue | Urgency and Status |
|----|----------------|---|--------------------|
| | | <p>8:00 AM on the Scheduling Day on which the Commissioning Test Plan would apply.</p> <p>If a Market Participant cannot conform to its most recently approved Commissioning Test Plan, the Market Participant must notify System Management; and either:</p> <ul style="list-style-type: none"> • 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. <p>Specific Issues:</p> <p>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.</p> <p>Examples for improvements are:</p> <ul style="list-style-type: none"> • 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. <p>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).</p> | |

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.

Table 2 – Broader Issues

| Id | Submitter/Date | Issue | Urgency and Status |
|----|----------------|--|--------------------|
| | | <ul style="list-style-type: none"> ○ 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:
 - group the issues together where appropriate;
 - determine the order of priority for the grouped Broader Issues;
 - conduct preliminary reviews to scope out the Broader Issues; and
 - 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.

Table 3 – Preliminary Reviews

| Review | Status |
|--|--|
| (1) Behind-the-meter issues | <p>Issues: 2, 16, 35.</p> <p>Status: Preliminary discussion is not yet scheduled.</p> <p>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.</p> <p>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 from the DER Roadmap.</p> |
| (2) Forecast quality | <p>Issues: 9.</p> <p>Status: Preliminary discussion is not yet scheduled.</p> |
| (3) Commissioning Tests | <p>Issues: 39.</p> <p>Status: Preliminary discussion is not yet scheduled.</p> |
| (4) The basis of allocation of Market Fees | <p>Issues: 2, 16, 23 and 35.</p> <p>Status: Preliminary discussion is not yet scheduled.</p> |
| (5) The Reserve Capacity Mechanism (excluding the pricing mechanism) | <p>Issues: 1, 3, 4, and 30.</p> <p>Status: Preliminary discussion is not yet scheduled. The preliminary discussion should address outstanding customer-side issues.</p> |

Table 4 – Issues on Hold

| Id | 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 | <p>Review of participant and facility classes to address current and looming issues, such as:</p> <ul style="list-style-type: none"> • 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. <p>Would support new entry, competition and market efficiency; particularly supporting the achievement of Wholesale Market Objectives (a) and (b).</p> | <p>On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).</p> <p>Treatment of storage facilities was considered under the preliminary review of the treatment of storage facilities in the market.</p> |
| 11 | AEMO November 2017 | <p>Whole-of-system planning oversight:</p> <p>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</p> | <p>This issue was initially flagged for consideration as part of the preliminary review of roles in the market.</p> <p>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</p> |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|----|-----------------------|---|---|
| | | <p>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).</p> <p>This function would support the achievement of power system security and reliability, in line with Wholesale Market Objective (a).</p> | <p>Regulatory Frameworks workstream are known (mid-2020).</p> <p>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.</p> |
| 12 | AEMO November 2017 | <p>Review of institutional responsibilities in the Market Rules.</p> <p>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).</p> | <p>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).</p> <p>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).</p> |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|-------|---|---|--|
| 14/36 | Bluewaters and ERM Power November 2017 | <p>Capacity Refund Arrangements:</p> <p>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:</p> <ul style="list-style-type: none"> • 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. <p>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:</p> <ul style="list-style-type: none"> • 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. | <p>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.</p> |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|----|-----------------------------|--|--|
| 17 | Bluewaters November 2017 | <p>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.</p> <p>This can result in under reporting of Forced Outages, and as a consequence, use of incorrect information used in WEM settlements.</p> <p>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.</p> <p>Accurately reporting outages will enable the WEM to function as intended and will help meet the Wholesale Market Objectives.</p> | On hold pending a final decision on RC_2014_03: Administrative Improvements to the Outage Process. |
| 18 | Bluewaters November 2017 | <p>The Spinning Reserve procurement process does not allow Market Participants to respond to the draft margin values determination by altering its Spinning Reserve offer.</p> <p>Bluewaters recommended amending the Market Rules to allow Market Participants to respond to the draft margin values determination by altering its Spinning Reserve offer.</p> <p>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</p> | On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020). |

Table 4 – Issues on Hold

| Id | 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 | <p>The Spinning Reserve margin values evaluation process is deficient for the following reasons:</p> <ul style="list-style-type: none"> • shortcomings in the process for reviewing assumptions; • inability to shape load profile; • lack of transparency: <ul style="list-style-type: none"> (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. <p>As a result, the margin values have been volatile, potentially inaccurate and not verifiable.</p> <p>Recommendation: conduct a review on the margin values evaluation process and propose rule changes to address any identified deficiencies.</p> <p>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:</p> <ul style="list-style-type: none"> • promoting transparency – better informed Market Participants would be able to better respond to Spinning Reserve requirement in the WEM; and | <p>On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).</p> <p>Also, AEMO and the ERA to consider whether any options exist to improve transparency of the current margin values process.</p> |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|----|-----------------------------|--|--|
| | | <ul style="list-style-type: none"> 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 | <p>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).</p> <p>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).</p> <p>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).</p> <p>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.</p> | <p>This issue was on hold pending completion of AEMO's 'Reduction of Prudential Exposure 2' project, which is now complete.</p> <p>AEMO noted that Credit Support and prepayment are important, but different prudential instruments:</p> <ul style="list-style-type: none"> 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. <p>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.</p> |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|-------|--|--|--|
| | | <p>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.</p> <p>Recommendation: amend the Market Rules and/or procedures to eliminate the duplication of prudential burden on Market Participants.</p> <p>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.</p> | <p>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.</p> <p>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.</p> <p>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.</p> |
| 27/54 | <p>Kleenheat November 2017 MAC August 2018</p> | <p>Review what should constitute a Protected Provision of the Market Rules, to provide greater clarity over the role of the Minister for Energy.</p> <p>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</p> | <p>On hold pending the outcome of an EPWA review of the current Protected Provisions in the Market Rules, with timing dependent on ETS.</p> <p>EPWA and RCP Support are to develop principles for identifying which rules should be Protected Provisions for presentation and discussion by the MAC.</p> |

Table 4 – Issues on Hold

| Id | 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 | <p>Logging of Forced Outages</p> <p>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.</p> <p>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.</p> | On hold pending a final decision on RC_2014_03: Administrative Improvements to the Outage Process. |
| 42 | ERA November 2017 | <p>Ancillary Services approvals process</p> <p>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</p> | On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020). |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|----|----------------|---|--------------------|
| | | <p>first time in 2016/17. In carrying out the process it became apparent that:</p> <ul style="list-style-type: none"> • 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. <p>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</p> | |

Table 4 – Issues on Hold

| Id | 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 | <p>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 <i>Wholesale Electricity Market Rules Amending Rules 2017 (No. 3)</i>:</p> <ul style="list-style-type: none"> • 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. | <p>On hold until the regulatory changes for the Foundation Regulatory Frameworks workstream are known (mid-2020).</p> <p>AEMO agreed to provide an update to the MAC on the proposed arrangements for generator performance models proposed as part of the ETS.</p> |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|----|---------------------|--|--|
| | | <ul style="list-style-type: none"> 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 | <p>Identification of services subject to outage scheduling</p> <p>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.</p> <p>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.</p> <p>(See section 7.2.2.5 of the Final Rule Change Report for RC_2013_15.)</p> | 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). |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|----|---------------------|--|--|
| 58 | MAC October 2019 | <p>Outage scheduling for dual-fuel Scheduled Generators</p> <p>'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.</p> <p>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.</p> <p>(See section 7.2.2.5 of the Final Rule Change Report for RC_2013_15.)</p> | 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 | <p>Ancillary Service outage scheduling anomalies</p> <p>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:</p> <ul style="list-style-type: none"> • 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). |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|----|---------------------|--|--|
| | | <p>may differ from the standard outage scheduling provisions for Equipment List Facilities;</p> <ul style="list-style-type: none"> • 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. <p>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.</p> <p>(See section 7.2.2.5 of the Final Rule Change Report for RC_2013_15.)</p> | |
| 60 | MAC October 2019 | <p>Outage scheduling obligations for Interruptible Loads</p> <p>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.</p> <p>This is a problem because the counterparty to an Interruptible Load Ancillary Service Contract may be an Ancillary Service</p> | 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). |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|----|---------------------|--|--|
| | | <p>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.</p> <p>(See section 7.2.3.1 of the Final Rule Change Report for RC_2013_15.)</p> | |
| 61 | MAC October 2019 | <p>Direction of Self-Scheduling Outage Facilities</p> <p>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:</p> <ul style="list-style-type: none"> • 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). |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|----|---------------------|---|--|
| | | <p>does not include any reference to Planned Outages of Self-Scheduling Outage Facilities.</p> <p>(See section 7.2.3.2 of the Final Rule Change Report for RC_2013_15.)</p> | |
| 62 | MAC October 2019 | <p>Outage scheduling obligations for non-intermittent Non-Scheduled Generators</p> <p>Under the Market Rules:</p> <ul style="list-style-type: none"> • 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. <p>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).</p> <p>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</p> | 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). |

Table 4 – Issues on Hold

| Id | Submitter/Date | Issue | Urgency and Status |
|----|----------------|---|--------------------|
| | | <p>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.</p> <p>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.</p> <p>(See section 7.2.3.4 of the Final Rule Change Report for RC_2013_15.)</p> | |

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.

MARKET ADVISORY COMMITTEE MEETING, 27 April 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 | <p>Market Procedure: Settlements (consequential changes required in relation to RC_2019_04: Administrative Improvements to Settlement).</p> <p>Market Procedure: Facility Registration, De-registration and Transfer (minor administrative changes and formatting improvements).</p> | TBC |

3. AEMO PROCEDURE CHANGE PROPOSALS

The status of AEMO Procedure Change Proposals is described below, current as at 2 February 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 |
|---|---|--|-------------------------|----------------------|
| AEPC_2020_01 Revisions to BMO tie-break methodology: <ul style="list-style-type: none"> • Market Procedure: Balancing Facility Requirements • Market Procedure: Balancing Market Forecast | The proposed amendments to the BMO tie-break methodology will assist AEMO manage the security of the power system during periods of low demand by enabling Facilities to offer minimum generation quantities as a separate tranche at the Minimum STEM Price. | Change proposal will be "Rejected". AEMO will manage security issues during periods of low demand via dispatch. No changes to BMO tie-break methodology required. | Procedure Change Report | 30 April 2021 |

Agenda Item 8(a): Overview of Rule Change Proposals (as at 20 April 2021)

Meeting 2021_04_27

- 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 | Close of second submission period | 19/05/2021 |

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 |

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

| Reference | 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 Rule Change Proposals with Consultation Period Closed | | | | | | |
| None | | | | | | |
| Fast Track Rule Change Proposals with Consultation Period Open | | | | | | |
| None | | | | | | |
| Standard Rule Change Proposals with Second Submission Period Closed | | | | | | |
| None | | | | | | |
| Standard Rule Change Proposals with Second Submission Period Open | | | | | | |
| RC_2019_03 | 17/12/2020 | ERA | Method used for the assignment of Certified Reserve Capacity to Intermittent Generators | High | Close of second submission period | 19/05/2021 |

| Reference | Submitted | Proponent | Title | Urgency | Next Step | Date |
|-----------|-----------|-----------|-------|---------|-----------|------|
|-----------|-----------|-----------|-------|---------|-----------|------|

Standard Rule Change Proposals with First Submission Period Closed¹

| | | | | | | |
|------------|------------|-------------------|---|--------|---|------------|
| 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 |

¹ The Panel will not progress RC_2014_05 or RC_2019_01 before the Panel is abolished on 30/06/2021, so responsibility to progress these two Rule Change Proposals will be transferred to the Coordinator of Energy (**Coordinator**) on 01/07/2021. The Panel will extend the deadline for the Draft Rule Change Report for these two Rule Change Proposals to give the Coordinator sufficient time to consider these proposals (the length of the extensions is to be determined).

The subject matter of RC_2018_03 overlaps with RC_2019_03, so the Panel may be able to further progress RC_2018_03, depending on progress of RC_2019_03. However, responsibility for RC_2018_03 may also be transferred to the Coordinator on 01/07/2021.

Rule Changes Made by the Minister

| Gazette | Date | Title | Commencement |
|----------|------------|---|--|
| 20201/17 | 18/01/2021 | Wholesale Electricity Market Amendment (Governance) Rules 2021 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ 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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • The Amending Rules commenced on 01/01/2021 |
| 2020/24 | 21/02/2020 | Wholesale Electricity Market Amendment (Reserve Capacity Pricing Reforms) Rules 2019 | <ul style="list-style-type: none"> • The first tranche commenced 22/02/2020 • The second tranche will commence on 01/10/2021 |

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

Way forward –
MAC Meeting 27 Apr 2021



Economic Regulation Authority

WESTERN AUSTRALIA

Purpose of this presentation

Continue the discussion from the MAC meeting on 2 February 2021 on the ERA's findings and recommendations from its [2020 review on two market rules intended to incentivise availability of generators Final Report](#).

Focus of this presentation and discussion:

- Set out the way forward.
- Address issues raised in the previous MAC meeting (2 Feb).

The way forward

Although the ERA is required to develop a rule change to progress recommendations from its review – there is no timescale for this and the ERA does not intend progressing a rule change at the moment.

This is because:

- At present, given the ERA's obligations under the rules, any rule change proposal could only have a fairly limited scope.
- Changing only a small part of the RCM would cause inconsistencies within the wider RCM.
- EPWA is considering a wholesale review of the RCM.

The ERA will continue to liaise with EPWA, AEMO and the MAC in considering the scope and timing of any rule change it may propose in the future.

Background and recap

- Details of the findings and recommendations were included in the [2 Feb 2021 MAC meeting papers](#).

The ERA was required to review:

- The reserve capacity reduction clause (4.11.1(h)) and the outage thresholds (4.11.1D).
- The Refund Exempt Planned Outage (REPO) clause (4.26.1C) limit.

[Final report](#) published on 29 Dec 2020.

What the clauses do – 4.11.1(h)

Clause 4.11.1(h) – reserve capacity reduction clause

- Is part of the process to determine the certified reserve capacity (CRC) of a generator, which represents the expected contribution to meeting the reliability planning criterion.
- Any generators with outage rates above the thresholds in 4.11.1D can have a lesser CRC assigned to them.

OUTAGE RATE LIMIT TABLE

| For AEMO decisions related to the Capacity Cycle | Forced Outage rate greater than | Combined Planned Outage rate and Forced Outage rate greater than |
|--|---------------------------------|--|
| Prior to 2015 | 15% | 30% |
| 2015 | 14% | 28% |
| 2016 | 13% | 26% |
| 2017 | 12% | 24% |
| 2018 | 11% | 22% |
| 2019 onwards | 10% | 20% |

What the clauses do – 4.26.1C

Clause 4.26.1C – REPO clause limit

- Only applies to scheduled generators.
- The REPO Count is the equivalent number of trading intervals that a generator has been on planned outages.
- If the Refund Exempt Planned Outage (REPO) Count is over the REPO count limit, then a generator's planned outage is liable for refunds. If not, the generator's planned outage is exempt from refunds.
- The REPO Count is calculated over a rolling 1,000 trading day period prior to the next planned outage for that generator.

Final report recommendations

1. No change to the REPO count calculation or limit.
2. No change to the operation of clause 4.11.1(h).
3. Change the thresholds associated with clause 4.11.1(h) to zero (4.11.D).
4. Provide guidance to AEMO on how to use its discretion under clause 4.11.1(h).

These recommendations reinforce the link between a generator's CRC and capacity credits to its contribution to system adequacy.

Further details of the findings and recommendations were included in the [2 Feb 2021 MAC meeting papers](#).

Rationale

The reliability requirement (WEM Objective 1.2.1(a)) is set by the planning criterion.

- To meet the reliability requirement:
 - A generator's expected available capacity during system reliability stress must be determined. This determines its capacity contribution.
 - Accounting for forced outages is required to determine a generator's expected available capacity.
- For generators, the ERA's proposed process will provide transparency on how outages are considered when certifying capacity through clause 4.11.1(h).
- Over-forecasting of generators' capacity contributions may lead to less capacity than necessary being procured to meet system reliability requirements.

The proposed calculation of Certified Reserve Capacity

- The proposed calculation of a generator's CRC aims to reduce the risk of AEMO under-procuring capacity and risking system reliability, or over-procuring capacity and increasing costs to consumers.
- Currently, a generator's CRC is determined by its rated capacity at 41 C. Outages can only be accounted for if the outage threshold is breached.
- The proposed method provides a measurement of capacity in-line with international practise of determining capacity contributions of generators (see PJM).

The proposed calculation of CRC (cont.)

- A generator's capacity contribution is measured by adjusting a generator's rated capacity by the likelihood of that capacity being available when needed. (One metric to capture this likelihood is using EFORd.)

$$\text{Certified Reserve Capacity} = \text{rated capacity at } 41 C \times (1 - \text{EFORd})$$

*EFORd = Equivalent demand forced outage rate.
This is a measure of the probability that a generator will
not be available due to forced outages when it is needed.*

- Capacity contribution is a measure for the whole capacity year and not a measure determined for system reliability stress periods only. A generator's availability during these stress periods determines its capacity contribution.

Reliability issues - general

Implications of over-estimating system reliability

- Although Summer is normally the time of greatest reliability stress due to high demand, reliability stress events can also occur at other times of the year when reserve capacity is low (e.g. due to many generators being out on maintenance).
- The findings from the ERA's review shows that the current clause (4.11.1(h)) can contribute to an over-estimate of capacity contributions of scheduled generators. Once outages are accounted for, the level of excess capacity may be lower than the current measurement.
 - If there is an estimated shortfall in expected capacity contribution to meet system reliability, then additional capacity may need to be procured to meet this requirement.

Reliability issues - measurement

Measuring capacity to meet reliability requirements

- Adopting the ERA's recommendations would allow AEMO to better account for the effect of outages when assigning CRC.
- Scheduled generators are the focus of the recommendation as the reserve capacity reduction clause applies to scheduled generators.
- **One-off forced outages:** the proposed process allows generators to provide AEMO with their own forced outage rate that accounts for one-off events and preventative actions (i.e. maintenance). If no information is provided, AEMO would rely on historical data.
- Frequently operating generators with low levels of forced outages would not see a large change to their levels of CRC.
- Less frequently operating, less reliable generators will see their CRC change based on how often a facility fails to generate when needed.

Thank you

Ask any questions



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