

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
	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 	

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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. 	

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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>	

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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
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"> <li data-bbox="320 636 1158 925">• 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. <li data-bbox="320 949 1158 1317">• 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"> <li data-bbox="320 1576 1158 1686">• 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. <li data-bbox="320 1711 1158 1888">• 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. <li data-bbox="320 1912 1158 2011">• 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