



Minutes

Meeting Title:	Market Advisory Committee (MAC)
Date:	2 February 2023
Time:	9:30am –11:05am
Location:	Energy Policy WA and Microsoft Teams

Attendees	Class	Comment
Sally McMahon	Chair	
Dean Sharafi	Australian Energy Market Operator (AEMO)	
Martin Maticka	AEMO	
Genevieve Teo	Synergy	
Noel Schubert	Small-Use Consumer Representative	
Patrick Peake	Market Customer	
Geoff Gaston	Market Customer	
Jacinda Papps	Market Generator	
Adam Stephen	Market Generator	
Paul Arias	Market Generator	
Peter Huxtable	Contestable Customer	
Noel Ryan	Observer appointed by the Minister	
Matt Shahnazari	Observer appointed by the Economic Regulation Authority (ERA)	Proxy for Rajat Sarawat

Also in Attendance	From	Comment
Dora Guzeleva	MAC Secretariat	Observer
Shelley Worthington	MAC Secretariat	Observer
Laura Koziol	MAC Secretariat	Observer
Tim Robinson	Robinson Bowmaker Paul (RBP)	Presenter

Apologies	From	Comment
Timothy Edwards	Metro Power	
Zahra Jabiri	Western Power	
Rajat Sarawat	ERA	
Christopher Alexander	Small-Use Consumer Representative	

Item	Subject	Action
1	<p>Welcome</p> <p>The Chair opened the meeting at 9:00am with an Acknowledgement of Country.</p> <p>The Chair advised that there had been no change to her conflicts of interest since the last MAC meeting.</p> <p>The Chair noted the competition law obligations of the MAC members, asked that members read the paper outlining these obligations and invited members to bring any matters they may identify to the attention of the Chair.</p> <p>The Chair also noted that MAC members are to operate in the interests of the category of membership they represent and achieving the objectives of the Wholesale Energy Market (WEM) and that the purpose of the MAC is to advise the Coordinator whether the WEM is working as intended.</p>	
2	<p>Meeting Apologies/Attendance</p> <p>The Chair noted the attendance and apologies as listed above and welcomed the reappointment of members to the MAC, including the new member Mr Stephen.</p>	
3	<p>Minutes of Meeting 2022_12_13</p> <p>The MAC accepted the minutes of the 13 December 2022 meeting as a true and accurate record of the meeting.</p> <p>Action: The MAC Secretariat to publish the minutes of the 13 December 2022 MAC meeting on the Coordinator’s Website as final.</p>	<p>MAC Secretariat</p>
4	<p>Action Items</p> <p>The Chair noted there were no open action items.</p> <p>Ms Guzeleva noted that Mr Schubert had provided some written comments on the Cost Allocation Review (CAR) Consultation Paper.</p>	
5	<p>Market Development Forward Work Program</p> <p>The paper was taken as read.</p>	
6	<p>Update on Working Groups</p> <p>(a) AEMO Procedure Change Working Group (APCWG)</p> <p>Mr Maticka noted the recent procedure changes resulting from the AEPC_2022_01 Certification of Reserve Capacity (CRC) procedure change proposal. Mr Maticka noted that the questions raised on that proposal were responded to individually but invited members to get in touch him if there were any further questions.</p> <p>Mr Maticka noted that the other procedure change proposal consultation, which closed on 24 January 2023, related to the Distributed Energy Resources (DER) procedure. He noted that Western Power had asked to discuss this separately with AEMO but that this was in relation to an operational query rather than the implementation of the proposed changes.</p>	

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(b) RCM Review Working Group (RCMRWG)

Ms Guzeleva noted that Mr Sharafi would provide a short presentation to the group that would set some of the context.

Mr Sharafi presented to the MAC on the events on 30 January 2023.

Mr Sharafi apologised for not being able to send the slides ahead of the meeting and noted that they were relevant to the context of the discussion.

He noted that the slides presented information about the generation mix on Monday 30 January 2023, which was a historic day for the SWIS because it was the first time ever that AEMO had dispatched Supplementary Reserve Capacity (**SRC**).

Mr Sharafi noted, regarding the intermittent generation output, that the minimum wind output over the peak was only 28 MW. Mr Sharafi noted that this was not because of any planned outages or any constraints on the grid. The maximum wind generation output over a few periods during the peak was 40 MW, amounting to around 20% of the total Capacity Credit that wind generators are receiving.

- Mrs Papps queried Mr Sharafi's comment noting that she was aware that Yandin and Badgingarra were constrained during that period due to thermal constraints. Mrs Papps asked Mr Sharafi to confirm that this was correct as the information she had was that Alinta's wind generators were constrained on that day.

Mr Sharafi noted that this was not his understanding but that he would confirm that and get back to Mrs Papps.

Mr Sharafi noted that AEMO was advised ahead of time by the forecasters that wind would be very low and pointed to the chart depicting generation by fuel type. The chart showed that, over the peak period, there was effectively no intermittent generation.

Mr Sharafi noted that the slides highlight that AEMO needed generation during the peak demand in order to meet that peak demand. He added that the WEM does not have an energy problem, and that there is abundant energy that is creating challenges and issues. Mr Sharafi noted that the WEM has a power problem, instead, that was going to get worse as dispatchable generation retires and the share of intermittent generation grows.

Mr Sharafi noted that even if intermittent generation was increased tenfold it cannot meet the peak demand. He added that for AEMO, as the system operator, to be able to plan for the power system it required certainty and that certainty is not there. Mr Sharafi noted that AEMO is at the point it really needed firm capacity to be able to operate the power system and if this capacity is renewable then it has to be firm renewable.

Mr Sharafi noted that he did not think the public will accept load shedding each time there was a situation similar to what occurred on the 30 January. He asked the MAC members to consider if it is acceptable that during those extreme days AEMO is not able to meet the peak.

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	<p>The Chair noted that there was a need to connect these things in order to extract an outcome for what was required of the MAC and the work that the MAC is doing.</p> <ul style="list-style-type: none"> Mr Arias asked if there were any learnings that AEMO can share from that process, noting that it was the first dispatch of the SRC contracts. <p>Mr Sharafi noted that there had been some issues and learnings and that AEMO was investigating how SRC providers responded and, as the investigation had not been concluded, he may be able to provide further updates at the next MAC meeting.</p> <p>Ms Guzeleva noted that EPWA had commenced its SRC Review, as required under the Rules. She added that the first stage of the review would be about the process leading to the SRC contracts been signed and the second stage would be about what Mr Arias' question pertains to, on the performance of the SRC services. Ms Guzeleva noted EPWA would be sending questionnaires to the various participants during the first stage date and that will also happen for the second stage to get a full knowledge about the processes.</p> <ul style="list-style-type: none"> Mr Huxtable asked how much SRC AEMO got, noting that he did not believe he has seen a figure published anywhere. <p>Mr Sharafi responded that there was about 90 MW of SRC contracted.</p> <p>The Chair noted that EPWA was undertaking a review and the terms of reference for that review had been brought to the MAC at the December 2022 meeting and published on the website.</p> <p>Ms Guzeleva noted that the reason for the two stages to the review was that the first stage had to be run quickly because it was plausible that AEMO might need to call another SCR procurement after 1 April 2023. She also noted that members could have one to one meetings if they would like and that there would be consultation and further updates provided to the MAC.</p>	
	<p>Action: AEMO to confirm whether the Yandin and Badgingarra wind farms were constrained on 30 January 2023, at the next MAC meeting on 16 March 2023.</p>	<p>AEMO</p>
	<p>Action: AEMO to provide an update on any learning to be shared from activating SRC on 30 January 2023, at the next MAC meeting on 16 March 2023.</p>	<p>AEMO</p>

The papers for agenda item 6(b) were taken as read.

The Chair noted that MAC members are being asked to:

- note the proposed methodology for the certification of intermittent generators;
- note the minutes from the last RCMRWG meeting and the meeting of 15 December 2022 (which were circulated separately prior to the MAC meeting);
- note the process that has been undertaken since 2018; and
- provide any feedback on the recommended approach and the way forward.

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	<p>Ms Guzeleva noted that there had been a RCMRWG meeting the previous day (1 February 2023). She added that the minutes from the 15 December 2022 meeting, which were approved at the 1 February meeting, were very relevant to today's discussion and would provide good context for those who had an opportunity to review them.</p> <p>Ms Guzeleva noted that slide 2 was provided to recap what has happened since 2018. She noted that EPWA has received a lot of feedback that this process has gone for far too long and taken too much effort and resource. The current method is not fit for purpose and the time has come to move on. She added that this MAC meeting should be the final stage of the discussion and will be followed with a final paper with the decision and draft rules to be implemented as soon as practicable.</p> <p>Ms Guzeleva noted there is not an answer that will please everyone, which is why it has taken so long, but that the industry cannot spend five years on something without a result. Whatever the answer is, it needs to meet the reliability requirements so the fleet value is very important and then distribution of that fleet value across individual facilities becomes a matter of finding the most balanced approach.</p> <p><u>Volatility in Fleet Performance (Slide 5)</u></p> <p>Mr Robinson reinforced the message that volatility from year to year in the output of the method that allocates CRC is primarily driven by volatility in the output of the intermittent generators and noted that there was no getting away from the fact that the intermittent generation is volatile. With the use of best historical data available, there is an inherent level of generation volatility that can drive volatility in the outcome of the CRC method.</p> <p>Mr Robinson acknowledged that this may not be ideal for investors, but inherent volatility is a real thing that must be accounted for in the method even if it results in different results from year to year. There are things that can be done to smooth the volatility but not at the expense of increasing the risk to system reliability.</p> <p><u>Determining the Fleet Effective Load Carrying Capability (ELCC) (Slide 6)</u></p> <p>Mr Robinson noted that there are a number of ways to calculate the ELCC and provided an overview for the approach used in the analysis. He noted that, while the method can account for all of the demand intervals in a year, the result is going to be dependent on what the performance was in a small number of intervals with the highest likelihood of unserved energy, which are likely to be the peak demand intervals. He added that what the performance of the intermittent facilities was in those peak intervals will determine the Fleet CRC.</p> <p>Mr Robinson noted that the method takes any curtailed amount into account because there is a need to know what the intermittent facilities would have provided had they not being curtailed. Mr Robinson noted that this was a slightly different ELCC calculation than what was in the Rule Change Panel report but that the aim was to try and get an equivalent firm value from the historical traces.</p>	

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	<p>Ms Guzeleva noted there was a typo on slide 6. The number should be 0.0015% not 0.015%.</p> <ul style="list-style-type: none"> Mr Sharafi referred back to what he had presented earlier and noted that if a facility is behind a constraint and can be curtailed makes it really ineffective for the system operator to rely on in dispatch. He asked if a facility cannot be dispatched, how it can be considered in the CRC method. He referred to Mrs Papp's statement earlier that she believed that Yandin and Badgingarra were curtailed and noted that, while this might be the case, if they could not be dispatched because they are behind a constraint, this was not very useful to AEMO. <p>Mr Robinson noted that, in a market with constrained dispatch, that is a really strong signal that perhaps there should be some network investment to remove the need for curtailment. He also noted that this was the reason for introducing the network access quantity (NAQ) regime in that, if a facility is likely to be curtailed at the time of peak, then it is not helpful to give it Capacity Credits. Mr Robinson reminded that MAC that this process is about setting CRC and the NAQs process deals with those network effects.</p> <p>Ms Guzeleva added that capacity without a NAQ is not counted as MW meeting the reliability criteria and cannot be relied on.</p> <ul style="list-style-type: none"> Mr Schubert noted the need to make sure that the curtailment was actually necessary and not due to conservatism on the Network Operators behalf. <p>Ms Guzeleva noted in the future there will be proper optimization on the basis of constraint equations by the AEMO dispatch engine.</p> <ul style="list-style-type: none"> Mr Schubert noted the information on the basis of which the constraint equations were built is provided to AEMO by Western Power and could still be conservative. <p>Ms Guzeleva noted that there were checks and balances as there was the option for people to complain to the <u>Economic Regulation Authority (ERA)</u> regarding this.</p> <p>The Chair noted that there were lots of things that could go wrong which is why the governance is important.</p> <p>Mr Robinson noted that one of the things that was taken on board following the consultation paper was the volatility from year to year. He added that one of the working group participants proposed to average the individual year outputs rather than look at the period as a whole (because that would reduce the volatility year to year).</p> <p>To address some of that volatility, it is proposed to take the period as a whole as well as average the individual year outputs, but then use the lower of the two to avoid increasing the risk to system reliability. Mr Robinson noted some years have a system stress event some years do not and so it is proposed to remove the year with the lowest peak demand from the sample.</p> <ul style="list-style-type: none"> Mr Schubert supported the approach and noted that the reserve capacity requirement is determined by the 10% Probability of Exceedance (POE) years which did not happen very often. He 	

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	<p>considered that there was a need to weight those years more than the years where there is lower peak demand.</p>	
	<p>Mr Robinson noted that this was what the ELCC method does - the years which actually had the highest peak demands drive more of the result than the other years do.</p>	
	<p>The Chair noted that there were no questions or objections to the approach to determining Fleet ELCC, noting there would be no further consultation on this.</p>	
	<p><u>Determining Facility ELCC (slide 17 and 18)</u></p>	
	<p>Mr Robinson provided a recap of the three methods considered, noting that this area had been slightly more controversial and that the slides provided some of the results of the analysis and options to mitigate some of the volatility.</p>	
	<p>Mr Robinson noted that there was a strong message from the RCMRWG that a simpler method was required, and if particular intervals were chosen participants and investors can apply the method themselves. Mr Robinson noted that as a result a simpler method is proposed. However, if particular intervals are to be used, then these should be the same intervals that are used for setting the Individual Reserve Capacity Requirement (IRCR), which apply to the demand side. This will align everybody's incentives to drive behaviour in the same direction.</p>	
	<p>Mr Robinson noted that there had not been a great deal of discussion on this with the RCMRWG. However, assessing individual facility performance in a set of performance intervals that are consistent with IRCR would satisfy the long list of policy design goals including system reliability, because the Fleet CRC will be set on an ELCC basis.</p>	
	<p>Ms Guzeleva noted, for the benefit of those who were not at the RCMRWG the previous day, that a number of options were presented on setting the IRCR intervals and that this was a very good discussion. She considered that the group broadly supported to keep the principle of setting the IRCR intervals as it is today, but looking into whether the number of the IRCR intervals was sufficiently large to pick up the right stress events and noted that there would be additional analysis.</p>	
	<p>Ms Guzeleva noted that there were 3 other proposals that were not accepted by the group. This is why this new option was developed. The next step is to refine this new preferred option and bring it back to the MAC at the next meeting.</p>	
	<p>Mr Robinson noted that there was little support for one of the other options and also a request to see if we could make the low reserve margin option slightly more predictable. However, the general weight of the discussion tended towards selecting the high demand intervals to reflect the changing nature of the shape of the load.</p>	
	<p>The Chair asked Ms Guzeleva what she is asking of the MAC.</p>	
	<p>Ms Guzeleva noted that the proposal is to use the IRCR intervals for setting the CRC for individual intermittent facilities, noting that the intervals might be expanded to cover as much of the stress events as</p>	

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	<p>practicable. She was looking for any particular objections to doing that and the basis of any objection.</p> <ul style="list-style-type: none"> <li data-bbox="300 264 1214 360">Mrs Papps asked if one of the previous slides showed what the outcomes are of using the IRCR intervals or was there no analysis of that. <p>Mr Robinson noted that there was no analysis of what the outcomes would be of using the IRCR intervals because it had not yet been determined what the IRCR intervals would be in the future. He noted, however, that slide 5 shows the analysis for the fleet in the top 12 intervals versus the IRCR intervals. This showed that the IRCR intervals are not the same as the same number of highest demand intervals. This could mean that the current IRCR method is not selecting all the highest demand intervals, i.e. it is selecting some lower demand intervals instead. Some of the discussion at the latest RCMRWG meeting was on how the IRCR method could be refined in order to make sure that it selects all of the intervals that comprise stress events.</p> <ul style="list-style-type: none"> <li data-bbox="300 801 1214 1003">Mrs Papps noted her concern that using the IRCR intervals might come back to the very same problem with the Delta method. That is, that a very small number of intervals are selected that could severely skew the results. She asked if it was proposed to expand the number of IRCR intervals, so that the same issue does not occur. <p>Mr Robinson noted that Mrs Papps was right that, as the system stress events only happen in a small number of intervals, results are likely to be more volatile. One of the concerns raised by the last RCMRWG meeting was that if only one day was selected if all of the highest demand intervals happened on that day. As there are a couple of past years in which the highest demand happened on the same day, the group discussed options to make sure that the IRCR intervals were not all selected on a single day.</p> <ul style="list-style-type: none"> <li data-bbox="300 1308 1214 1404">Mrs Papps asked if the MAC members were being asked to approve or endorse a methodology without knowing what they were endorsing (because the next bit of work had not been done). <p>Mr Robinson noted that endorsement is being sought on two levels. Firstly, RCMRWG members had recommended that performance is assessed over predetermined intervals because this is a simple method that can be understood by investors. Secondly, if predetermined intervals are to be used, it is appropriate to use the same intervals that are used for setting IRCR. If there are concerns that there are too few IRCR intervals, this can be discussed in the IRCR methodology assessment process.</p> <p>Ms Guzeleva asked if it was fair to assume that if five years or IRCR intervals are used this will pick up more intervals than the Delta method did, noting that the concern with the Delta method was that it was picking too few intervals.</p> <p>Mr Robinson noted that this was correct.</p> <p>Ms Guzeleva noted that the method for distribution of the fleet amongst the facilities needs to be decided and the exact intervals can be refined.</p>	

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	<p>The Chair asked Mrs Papps to indicate if the discussion has captured her concern.</p>	
	<ul style="list-style-type: none"> Mrs Papps noted that, because there was still a piece of the puzzle that is yet to be solved, it was hard to agree to the method. 	
	<p>The Chair noted that Mrs Papps had concern with accepting something in principle without knowing what its impact was going to be.</p>	
	<ul style="list-style-type: none"> Mrs Papps agreed with the Chair's comment noting that she very strongly supported moving this forward as well and agreed with Ms Guzeleva that five years without an outcome is too long. 	
	<p>The Chair asked other members of the MAC if they had any further questions or comments.</p>	
	<ul style="list-style-type: none"> Mr Peake noted that he was supportive of what was being proposed and that adding more intervals to the IRCR would be good. 	
	<p>The Chair noted that Mr Peake was comfortable with the proposal knowing that there was subsequent analysis to address remaining aspects.</p>	
	<ul style="list-style-type: none"> Mr Schubert supported the proposal of using the IRCR intervals and noted that the intent was to identify those intervals that actually matter to reliability. He hoped that the next step would come up with a good method for selecting the right intervals. Mr Huxtable was supportive of the approach and moving forward. Mr Arias had no objections but noted the need to make sure that that the range of intervals is wide enough to adequately represent performance, rather than focusing on one year. Mr Stephen noted that the purpose of the proposed alignment was to keep things simple. 	
	<p>Ms Guzeleva noted that the Fleet CRC value is not going to be changed by this, as this is about distribution of the value amongst the various facilities in the fleet.</p>	
	<ul style="list-style-type: none"> Mr Schubert noted that he understood this but that it is the individual facilities values that of most concern to the investors. Mr Huxtable asked how an event like Monday's (referring to the slides presented by Mr Sharafi) would affect the Fleet CRC value and whether the next year fleet value will shift markedly because of it. 	
	<p>Ms Guzeleva confirmed that the Fleet CRC value would be based on intervals like those on Monday.</p>	
	<p>Mr Robinson noted that the peak demand on that day of 3,800 MW, if that is the highest demand this year, is still 200 MW lower than the highest peak demand in the past. If within the CRC calculation horizon there are some years, which had higher peak demand than the demand on Monday, then the Fleet CRC result will be more influenced by those intervals of higher demand than this year's. However, if this year's peak demand intervals are taken into account</p>	

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	<p>by the calculation, fleet performance in those intervals will flow into the fleet ELCC value and, all else being equal, would bring it down.</p>	
	<ul style="list-style-type: none"> • Mr Gaston had concerns that it is proposed to use a method that is used to allocate costs to customers and shoehorn that method for assigning Capacity Credits to participants. He referred to what he said at the previous day RCMRWG meeting - that the IRCR method needs to be easy for customers to understand. He had concerns that this may potentially be compromised to try to accommodate more Capacity Credits for the intermittent generators. • Mr Gaston noted, however, that he did support, in principle, treating renewable or intermittent generators like loads but they should be getting all the different costs that go with that treatment. However, he did not support using reserve margins to identify IRCR intervals, noting that IRCR is there to cover the reserve capacity requirement. This is currently based on peak demand and this needs to remain as otherwise IRCR intervals may end up at midnight in July. 	
	<p>Ms Guzeleva noted that the minutes from yesterday's RCMRWG meeting will show that using the reserve margins to identify the IRCR intervals was clearly not supported. The group did not support moving from basing the IRCR on the peak demand intervals and the stress events.</p>	
	<ul style="list-style-type: none"> • Mr Gaston noted that trying to repurpose the IRCR methodology for another purpose instead of just fairly allocating costs to customers, will lead to other participants trying to use it to maximize their own benefits. 	
	<p>Ms Guzeleva agreed that it is not acceptable to expand the IRCR intervals just for the sake of assigning more Capacity Credits to facilities.</p>	
	<p>The Chair acknowledged Mr Gaston's concern noting that it may also be related to others' concern to agree in principle to something while there was further work to be done on the detail. The Chair sought to clarify whether this was a matter of keeping that concern in mind in moving forward, or if Mr Gaston did not support the proposal in principle.</p>	
	<ul style="list-style-type: none"> • Mr Gaston noted that he did like the idea of using the IRCR method because it was about performance during the peak demand, but was worried that some participants may want to have this designed so that it was better for them, rather than allocating costs to customers fairly. 	
	<p>The Chair noted that it will be important to understand how the process and the decision making around that process will address these concerns.</p>	
	<ul style="list-style-type: none"> • Ms Teo noted that she understood the need to keep it simple. • Mr Sharafi supported linking the CRC for individual facilities to IRCR, but did not support changing the IRCR method for that purpose, noting that anything that removes predictability of the IRCR intervals will be counterproductive. 	

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	<ul style="list-style-type: none"> Mr Maticka added to Mr Sharafi's comment noting that Mr Gaston has raised a very interesting point, in that different stakeholders potentially have different interests in how this is going to work, but, apart from that, agreed it is a reasonable way forward. <p>The Chair noted that she understood the concern and noted that that this would be about understanding what individual commercial interests might be versus achieving an outcome that is best for the WEM. The process should make sure that the focus is on what is best for the WEM, and declaring and understanding individual commercial interests. The Chair noted she had faith in Ms Guzeleva's ability to understand everybody's interests in that process.</p> <p>The Chair read comments from Mr Alexander, who was unable to attend the meeting, that he:</p> <ul style="list-style-type: none"> supported a pragmatic decision for item 6(b) that settles on a methodology that reflects the extensive analysis undertaken to date that allows everyone to collectively move on to other pressing market reform challenges such as creating the right signals for long duration storage. believed that the long history of this issue is detailed in the slides, and stakeholders have had opportunity to coalesce around a methodology suggested by industry, and so the MAC should be comfortable to make a decision today. strongly supports the principle of simplicity and work by EPWA to make the methodology as transparent and user-friendly to understand and apply for investors (without undermining the integrity of the methodology). if Mr Alexander were in the meeting, he would have asked MAC members a clarifying question about what it is about the EPWA methodology as it stands that makes it hard for investors to apply. <p>Mr Robinson noted that the concern was not that the proposed method would be hard to apply, but rather that some of the previously proposed methods would be hard to understand.</p> <p>Ms Guzeleva noted that the 3 methods that were hard to understand were discussed at the RCMRWG meeting. The use of the IRCR has been proposed to address the concern that the Delta method would be very difficult to understand.</p> <ul style="list-style-type: none"> Mr Schubert noted that Dr Shahnazari and the ERA has done a lot of analysis in their previous work on allocating CRC to intermittent generators and noted that, while Dr Shahnazari is an observer on the MAC he has a good understanding of the issues and may want to comment. <p>The Chair asked Dr Shahnazari if there was something he could add that will influence and/or change the views of the MAC or did he consider there to be missing information.</p> <ul style="list-style-type: none"> Dr Shahnazari noted that he has concerns about using the IRCR intervals for the allocation of CRC. The reason for this is that IRCR intervals should be based on system stress events and he believed that at the previous working group meeting there was consensus around this. 	

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	<ul style="list-style-type: none"> • Dr Shahnazari noted that if the CRC allocation is based on IRCR intervals (that is, on the system stress events), these events are moving into the evening periods. The solar farms are actually contributing to the reliability of the system by shifting demand from early afternoon towards later in the evening. If you base the CRC allocation on the IRCR intervals, there is a risk this will disadvantage some of these resources. That is something else that needs to be considered. 	
	<p>Ms Guzeleva noted that Dr Shahnazari is a RCMRWG member and comments like these should be actually raised the working group.</p>	
	<ul style="list-style-type: none"> • Mr Shahnazari noted that this methodology was not discussed at the RCMRWG because the group had not decided to use the IRCR method. 	
	<p>The Chair noted that Dr Shahnazari has made his objection and that this has been heard by the MAC members.</p>	
	<ul style="list-style-type: none"> • Mrs Papps asked a clarification question on the slide 18, which states that the allocation for CRC would be consistent with the IRCR intervals over the previous five years. She asked whether this meant that applying this over five years is still proposed. 	
	<p>Mr Robinson confirmed that this is correct.</p>	
	<ul style="list-style-type: none"> • Mrs Papps noted that she had not changed her opinion because she did not believe that this had been discussed at the working group. Mr Carlberg, who attended the RCMRWG meeting, had confirmed that he did not support aligning the CRC with the IRCR intervals. 	
	<p>The Chair noted that there was an RCMRWG meeting on the previous day and that the MAC has not had the advantage of having that conversation shared yet. However, she understood that what Ms Guzeleva had said was that group had discussed the IRCR method and there was further work that needs to be done on making sure this supports what the group is trying to achieve at a couple of levels, not just for this purpose. She added that the concerns that have been raised at the MAC will be taken into account.</p>	
	<p>Ms Guzeleva reiterated that this is only about the distribution of the fleet value amongst the individual facilities, and it does not impact reliability. The working group discussed 3 methods and there was no consensus on those 3 methods. The feedback from the working group was that the proposed methods are way too complex and have to be simplified because this is not good for investment. Given this an alternative much simpler method has now been proposed.</p>	
	<p>Ms Guzeleva noted that the RCMRWG feedback was taken on board and in the last set of slides presented to the RCMRWG had this simpler method, noting that it will be applied in a similar way to the IRCR is applied to loads, but over 5 years. She, however, accepted that there had not been extensive discussions at the RCMRWG</p>	
	<p>Ms Guzeleva asked the MAC if costs are distributed to customers on the basis of system stress events, what would be the logic of not looking at the performance of intermittent generators when the system is most stressed.</p>	

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	<p>Ms Guzeleva noted that, recognising that loads change during the year, basing the IRCR for loads on one year remains appropriate. However, for intermittent generators, the proposal is still to calculate the CRC over five years, which would also reduce the volatility of the outputs.</p> <ul style="list-style-type: none"> Mr Schubert noted that he believed that the RCMRWG and the MAC can work through these issues and address them going forward. He believed that Dr Shahnazari's comment was more about first movers whose intermittent generators help the system but then have their CRC reduced later when others come in but do not help. <p>Ms Guzeleva noted that analysis on the impact of newcomers indicated that this did not make material difference.</p> <ul style="list-style-type: none"> Mr Schubert noted that he was referring to first movers, the ones that have already built their facilities and have helped improve reliability because they were available when the peak used to be at the time. However, now the solar facilities are not helping anymore and wind, as seen on Monday, is not helping either. <p>Mr Robinson noted that analysis showed that if new facilities are added now, this does not seem to make a big difference for existing facilities. However, he understood Dr Shahnazari's concern that facilities that contributed to improving system reliability, when they were commissioned some years ago, are treated the same as those commissioned today but not making the same contribution.</p> <p>Ms Guzeleva noted that this would require a judgement on how much each facility had contributed to system reliability in the past, and that this has been discussed by the group and its complexity would outweigh any benefit.</p> <ul style="list-style-type: none"> Ms Teo noted that, not being a member of the RCMRWG herself, she did not realise that there had been discussions about using the IRCR methodology and that it did not sound like there was general agreement. Ms Teo noted that Synergy would like to see what the analysis is first before landing on applying the IRCR method to CRC. <p>The Chair noted that the point was that nobody had been able to identify another method that all will be happy with. What has been recommended is that the MAC agrees with the proposal in principle, and then work out how the concerns that are being raised can be taken into account.</p> <p>The Chair noted that perhaps the MAC was at a point where it does not have consensus on this issue, however, the majority of MAC members can support adopting the IRCR approach in principle but flagging concerns that MAC members want addressed in subsequent work.</p> <p>The Chair sought to clarify whether Mrs Papps objected to the use of the IRCR method in principle.</p> <ul style="list-style-type: none"> Mrs Papps noted that she did not object, but that she did not have enough information to agree. 	

Item	Subject	Action
	<p>The Chair asked Mrs Paps what information would she need, or what information did she have about another methodology that would be more acceptable that has not already been raised.</p>	
	<ul style="list-style-type: none"> • Mrs Papps noted that she was reasonably comfortable with the Collgar hybrid method, noting that she had not seen the previous three proposals analyzed against each other. 	
	<p>The Chair noted that there, despite this analysis being presented to the RCMRWG, there was no consensus. The MAC may need to acknowledge that the RCMRWG may not be able to reach consensus on the current proposal either, i.e. that some members of the group may not support it, but that this matter needs to keep moving forward. As it was outlined earlier, this has been the subject of discussions for five years.</p>	
	<p>The Chair asked what the best way to move this forward is and if there is another option to put forward than the one that is on the table.</p>	
	<ul style="list-style-type: none"> • Mrs Papps noted that she was comfortable with it moving forward, if it has to move forward, noting that she did not have enough information to know whether to support it. Mrs Papps reiterated that she did not believe this was discussed at the RCMRWG in detail and that this information came from Alinta's member Mr Carlberg who attended the meeting. • Mrs Papps noted that it was difficult for the MAC members, who are not necessarily the experts, to discuss this if a working group of experts has not discussed the proposal. Mrs Papps reiterated that she will not agree with it without understanding the full ramifications. 	
	<p>Ms Guzeleva noted the analysis will be done but the reality was that some facilities may be worse off and other facilities will be better off compared to other methods. If members are waiting to see that result and check whether the Collgar hybrid method was better for them then the discussion will be in the same place it has been for five years.</p>	
	<p>The Chair noted that there was a risk that the method is getting assessed based on the outcome for individual facilities as opposed to the WEM objectives.</p>	
	<p>The Chair noted that she understands that Mrs Papps was comfortable using the IRCR based method to move forward, but has concerns about the selection of the IRCR intervals, which other members have also raised. She sought to clarify Ms Teo's position and whether she supported, in principle, moving forward with the IRCR method for the facility CRC allocation.</p>	
	<ul style="list-style-type: none"> • Ms Teo noted that she supported exploring this alternative method but would like to see the outcomes. 	
	<p>The Chair noted that, once the results of the analysis are available, MAC members need to think about whether there is a problem with the outcome, in principle, as opposed to that outcome being commercially unfavourable to some of the members. At the end of the day the MAC's focus should be on the objectives of the WEM and not on individual organisations' commercial interests.</p>	

Item	Subject	Action
	<ul style="list-style-type: none"> Mrs Papps asked what if the outcome was so uneconomic that everyone exited the WEM or no new investment was attracted. <p>The Chair noted that if Mrs Papps was saying that using the IRCR method is likely to result in that, then she should clarify her objection.</p> <ul style="list-style-type: none"> Mrs Papps clarified that what she was saying was that she did not know what the IRCR method is going to result in because the MAC did not have any analysis in front of it. She reiterated that it is difficult to support the method without that analysis. <p>The Chair sought again to clarify Mrs Papps' position, and whether she could support the method, in principle, to move forward or if she could not support it, in principle.</p> <ul style="list-style-type: none"> Mrs Papps stated that she did not have enough information, and would want to lodge an objection on that basis. Mrs Papps also stated that, as she has previously said, she does not want to hold up progress. <p>The Chair summarised that there was general agreement and the MAC endorsed the conclusions of the RCMRWG in relation to the proposed method for the Fleet CRC determination. In relation to the Facility CRC allocation, the Chair noted that there was general, in principle, support for moving forward with using the IRCR method, recognising all the work that has been done to date and the number of methodologies that have been considered, but the MAC has not reached consensus on endorsing this method.</p> <p>The Chair noted that the concerns that have been raised by the MAC will be addressed by analysing the results of applying the IRCR method. Once those results are available, the MAC will take a WEM objectives view and be very conscious about the difference between that and the commercial interests of individual organisations.</p> <p>Ms Guzeleva suggested that when the results are brought back to the MAC for consideration, they will only be compared to the outcomes of the current Relevant Level method. Otherwise there will always be a method that somebody likes and another method that somebody else prefers.</p> <p>The Chair agreed but noted that MAC members should be committing to considering that analysis on the basis of principle objections, not individual outcome objections.</p>	

(c) CAR Working Group (CARWG)

The Chair of the CARWG reminded MAC members that the submission period on the CAR Consultation Paper closed on 9 February 2023.

She noted that EPWA has had discussions with AEMO about some aspects of the Consultation Paper and acknowledged that there was still further work to be done, particularly on the design of the methodology for distributing the costs of Frequency Regulation.

7 Rule Changes

(a) Overview of Rule Change Proposals

The paper was taken as read. There were no updates.

Item	Subject	Action
	Ms Guzeleva noted there were some typos in the first two columns as the reference to 2023 should be to 2022.	
9	General Business	
	Mr Sharafi requested that the duration of future MAC meetings be extended.	
	Ms Guzeleva noted that the meeting had been shortened as a once off due to there only been one agenda item, and that in future meetings would be of the usual 2 hour length.	
	Mr Schubert asked Mr Sharafi if the 3,800 MW on Monday 30 January was based on sent out or generated power.	
	Mr Sharafi responded that it was based on system load, which is generated and not sent out.	
	The next MAC meeting is scheduled for 16 March 2023.	

The meeting closed at 11:05am.