Minutes

Meeting Title:	Reserve Capacity Mechanism Review Working Group (RCMRWG)	
Date:	2 March 2023	
Time:	9:30 AM to 11:30 AM	
Location:	Microsoft TEAMS	

Attendees	Company	Comment
Dora Guzeleva	Chair	
Manus Higgins	AEMO	
Toby Price	AEMO	Subject matter expert
Oscar Carlberg	Alinta Energy	
Kiran Ranbir	ATCO Australia	
Daniel Kurz	SSCP Power	
Geoff Gaston	Change Energy	Subject matter expert
Andrew Stephens	Clear Energy Pty Ltd	
Jake Flynn	Collgar Wind Farm	
Matt Shahnazari	Economic Regulation Authority	
Owen Cameron	Enel X	Subject matter expert
Scott Cornish	Enel X	Subject matter expert
Dale Waterson	Merredin Energy	
Patrick Peake	Perth Energy	
Tessa Liddelow	Shell Energy	
Paul Arias	Shell Energy	From 10:15
Noel Schubert	Small-Use Consumer representative	
Andrew Walker	South32 (Worsley Alumina)	
Rhiannon Bedola	Synergy	
Dev Tayal	Tesla Energy	
Peter Huxtable	Water Corporation	
Mark McKinnon	Western Power	
Tim Robinson	Robinson Bowmaker Paul (RBP)	
Ajith Sreenivasan	RBP	
Shelley Worthington	EPWA (EPWA)	
Laura Koziol	EPWA	
Stephen Eliot	EPWA	

Item	Subject	Action
1	Welcome	
	The Chair opened the meeting at 9:30am.	
2	Meeting Apologies/Attendance	

The Chair noted the attendance as listed above.

3 Minute of RCMRWG meeting 2023 02 16

The draft minutes of the RCMRWG meeting held on 16 February 2023 2022 were distributed on 27 February 2023.

Mrs Bedola requested the following change to the minutes on page four to reflect what she said at the meeting:

Mrs Bedola considered that AEMO can rely less on loads to react to the IRCR signal than on a DSP that must respond to a dispatch instruction. If AEMO reduces its forecast demand because a load previously reduced consumption in response to the IRCR signal and the load does not react to the IRCR signal the next time this may cause issues for system reliability.

The RCMRWG accepted the minutes, as proposed to be amended, as a true and accurate record of the meeting.

Action: RCMRWG Secretariat to publish the minutes of the 16 February 2023 RCMRWG meeting on the RCMRWG web page as final.

RCMRWG Secretariat

4 **Action Items**

The paper was taken as read.

5 **Penalties on High Emission Technologies**

Mr Robinson presented the proposed option for the implementation of a penalty for high emission technologies. The Proposal is to apply emission thresholds for facilities seeking to be certified in the RCM:

- for new facilities: an emission rate threshold for the emissions per MWh produced and a quantity threshold for annual emissions per MW; and
- for existing facilities: a quantity threshold for annual emissions per

The following was discussed:

- Mr Kurz noted that his concerns raised in the previous RCMRWG meetings regarding the introduction of a penalty excluding high emitting facilities from participation in the RCM remain.
- Mr Schubert noted that the Merredin Gas Turbine and the Kalgoorlie Gas Turbine Power Station, which are listed as gas generators on slide11, are facilities that only run on distillate.

Mr Robinson acknowledged that this is the case and noted that the chart is only for illustration. The actual emission rate and annual emissions will reflect the actual values for the facilities.

The Chair clarified that a formula reflecting the expected fuel mix would need to be applied to assess new dual fuel facilities.

- Mr Peake considered that a new combined cycle gas facility can't be financed if it is only allowed to be dispatched for 30% of the Trading Intervals in a Capacity Year.
- Mr Carlberg agreed with Mr Peake.

In response to a question from Mrs Bedola, Mr Robinson clarified that the threshold for new facilities is proposed to be stable and not change. However, it is possible that a future reform could reduce the thresholds.

 Mrs Bedola considered that new facilities should be protected from changes to the threshold for a set period of time after they enter the market.

The Chair agreed that such a protection should be included.

In Response to a question from Mr Price, Mr Robinson noted that, if a Facility exceeded the annual emission threshold, because it had to be dispatched to maintain system reliability, it would still not be eligible for Capacity Credits in the next Capacity Cycle.

- Mrs Bedola considered that the annual threshold needs to be considered when assessing outages and refunds when a Market Participant does not want to offer its facility to avoid reaching the threshold.
- Mr Peake considered that the following needs to be modelled for the next 10 years to ensure that the proposed penalty allows the market to meet the new state electricity objective:
 - can the capacity needed to replace the retiring facilities and maintain system security and reliability be built;
 - o can the needed capacity be funded:
 - o can Western Power provide the needed network capacity; and
 - are there any implications for the gas transmission system.

The Chair agreed that whether the needed capacity can be built and funded should be modelled. However, modelling Western' Power's Network and the gas transmission network is not within the scope of the RCM Review.

Mr Robinson noted that the economic modelling will assess whether the needed new facilities are financially viable.

- Mr Kurz considered that:
 - the role of the RCM is to remunerate facilities to be available independent of the actual generation. Carbon taxes usually work because they directly penalize the emissions. Therefore, the proposed penalty is not aligned with the role of the RCM.

- new renewable facilities are hindered form entering the market by a lack of network access and not by the existence of high emitting facilities.
- the Gas Statement of Opportunities (GSOO) indicates that the retiring facilities cannot fully be replaced by gas fired facilities.
- Mr Kurz considered that the RCM is not the right place to implement a penalty on high emission technologies.
- Mr Schubert and Mr Waterson agreed with Mr Kurz.
- Mr Higgins asked whether options would be considered for a Market Participant to remedy breaching the threshold through buying carbon offset certificates.

The Chair noted that the option to incorporate carbon offset certificates had been considered in previous RCMRWG meetings and was found impracticable.

- Mr Price considered that the proposal incentivises Market
 Participants to not dispatch their facilities when needed to avoid
 losing the revenue stream from the RCM. This can risk system
 reliability.
- Mr Kurz considered that, as facilities retire, the remaining facilities will need to be dispatched more. Therefore, the more a facility is needed, the more likely it will breach the annual emission threshold.
- Mr Calberg questioned whether an annual threshold should be implemented at all. He considered that the proposed option could lead to a lower cost Facility not being offered into the market to avoid breaching the annual threshold.

The Chair noted that the proposed option is the preferred option because:

- o it is already applied in other markets (UK, EU);
- it aligns with the emission objectives;
- it provides certainty about when capacity from high emitting facilities must be replaced, which will help to address emission reduction while ensuring system reliability.
- Mrs Bedola and Mr Price expressed general support for the proposed option.

The Chair noted that the commencement and staging of the thresholds will be important to ensure system reliability is not at risk.

- Mr Peake noted that if the emission rate threshold is set to allow for a new gas fired peaking facility to enter the market, some margin needs to be applied because the actual emissions will depend on how the facility is dispatched.
- Mr Carberg agreed with Mr Peake.

The Chair agreed that such a margin should be considered.

6 Flexible Capacity – Additional Considerations

Mr Robinson provided a brief overview of the intervals that would be used to determine the flexible Individual Reserve Capacity Requirements under the proposed method.

The slides were taken as read.

7 Revisiting the Duration Gap

Mr Robinson presented the proposed options to address the duration gap. The proposed options are:

- Option 1: address the duration gap through the availability requirements for the proposed availability class 2;
- Option2: separate the duration requirement into several parts and select availability class 2 facilities with varying availabilities to fill the requirement; and
- Option 3: introduce a new capacity product to account for the duration gap.

The following was discussed:

- Dr Shahnazari considered that Option 2 would likely lead to cherry
 picking and assign different requirements to different resources.
 Instead, a price signal should be provided that would attract the
 right resources to cover the duration gap. Dr Shahnazari
 considered that an additional capacity product, as proposed under
 option 3, would likely overlap with the peak product.
- Mr Carlberg agreed with Dr Shahnazari and noted that he was against introducing an additional capacity product to address the duration gap. He considered that the product should not be implemented before the actual need arises. He questioned if the need could be fulfilled as needed using a similar mechanism as the Non-Co-optimised Essential System Services (NCESS).
- Mr Kurz agreed that the duration gap does not require immediate action but should be addressed in the medium-term.
- Mr Price considered that the duration gap appeared to be not a
 problem of capacity but a supply risk. He considered that there
 likely is a need for an additional product but questioned whether
 focusing on the hours after the peak intervals is the right approach.

Mr Robinson noted that a different product could be considered.

- Mr Schubert considered that the duration gap is an energy issue and not a capacity issue.
- Mrs Bedola considered that the duration gap is an issue for the RCM, as currently the Facilities subject to the 14 hour fuel obligation are covering the duration gap without being fairly compensated.

The Chair noted that the objective is to implement the right incentives for the needed capabilities.

- Mr Carlberg considered that in a market as small as the WEM, fewer signals will drive investment and additional incentives may just become noise. Mr Carlberg considered that longer availability of storage requires additional compensation which could be achieved through an NCESS process.
- Mr Peake supported Option 2 because it would allow AEMO to fill the exact need. However, Facilities with different availability duration would require different compensation.

8 Outages

The Slide was taken as read.

9 Next Steps

The Chair noted that the following items will be taken to the MAC:

- discussion about IRCR and DSPs form the previous meeting;
- discussion about the penalties for high emission technologies;
- discussion about the duration gap; and
- the next level of detail about the flexibility product,

noting that there was no consensus on the items discussed today. However, there was general consensus that:

- the implementation of emission thresholds is the preferred option for the penalties for high emission technologies; and
- the duration gap is a real issue but should be addressed at a later point in time.

9 General Business

Basing part of the IRCR on average consumption and not consumption during system peak

- Mrs Bedola noted that all customers receive reliability for 24 hours every day but pay for Capacity Credits based on their consumption share during peak demand periods captured by the IRCR. Mrs Bedola considered that customers should pay a share of the cost of Capacity Credits based on their average demand and another share based on their contribution to peak demand. This would mean:
 - customers would pay for capacity covering the duration gap and reliability during the entire year as well as for their contribution to peak demand; and
 - customers would not avoid paying for capacity by reducing their consumption during the IRCR intervals.
- Mr Schubert considered that the question is whether a load that does not consume during peak demand contributes to the Reserve Capacity Requirement.
- Mr Carlberg considered that including a base load consumption element into the IRCR would dilute the signal to reduce

- consumption during peak demand. Mr Carlberg also considered that the issue raised by Mrs Bedola should not be prioritised because the proposed method change may not result in a substantial change to the payments by participants.
- Dr Shahnazari considered that the determination of the IRCR should be aligned with the method for assigning Certified Reserve Capacity.
- Mr Cornish considered that the purpose of the RCM is to ensure there is sufficient capacity to cover peak load. The SWIS is a system with extreme peaks so the capacity needed to cover the top portion of these extreme peaks is not dispatched enough to justify the investment based on the energy market only. If this wasn't the case, the RCM would not be needed.
- Mrs Bedola noted that generation facilities have obligations to be available 24 hours every day.

The Chair noted that the reason generators have to be available outside of peak periods is to allow for effective scheduling of Outages.

 Mr Price agreed with Mr Carlberg and Mr Cornish that basing the IRCR on consumption during peak demand is currently appropriate because the IRCR should align with the setting of the Reserve Capacity Requirement. However, in future providing capacity outside of peak demand may become more relevant to the Reserve Capacity Requirement and the method for setting the IRCR may need to include an appropriate metric to account for this.

Incentives for Load Shifting

The Chair considered that it should be discussed how to reward shifting of load from the evening peak to the middle of the day.

 Mr Schubert considered that load shifting should be incentivised by retail tariffs.

The Chair noted that tariffs are out of scope for the RCM Review.

- Mr Carlberg considered that load shifting should not be part of the scope of the RCM.
- Mr Schubert considered that there are opportunities to shift load that are currently not realised and that the Coordinator's upcoming Demand Side Response Review could address the issue.
- Mr Huxtable considered that the WEM price signals are not strong enough to incentivise load shifting and that other options to incentivise load shifting should be investigated.
- Ms Ranbir supported the investigation of options to incentivise flexible loads through the RCM.
- Mr Cornish agreed that options for incentivising load shifting should be investigated. He noted that ENEL-X has recently started to offer a flexible retail contract in the NEM for loads that can shift their

Mr Peake questioned whether there are sufficient loads that could shift their load but currently don't to justify a change to the RCM.

The meeting closed at 11:30 am