# **Minutes**

| Meeting Title: | Reserve Capacity Mechanism Review Working Group (RCMRWG) |  |
|----------------|--|--|
| Date:          | 24 November 2022   |  |
| Time:          | 12:30pm to 2:00 pm                                       |  |
| Location:      | Microsoft TEAMS  |  |

| Attendees                   | Company                           | Comment                  |  |
|-----------------------------|-----------------------------------|--------------------------|--|
| Dora Guzeleva               | Chair                             |                          |  |
| Rhiannon Bedola             | Synergy                           |                          |  |
| Manus Higgins               | AEMO                              |                          |  |
| Toby Price                  | AEMO                              | Subject matter expert    |  |
| Jacinda Papps               | Alinta Energy                     |                          |  |
| Geoff DownPeter<br>Huxtable | Water Corporation                 | Proxy for Peter Huxtable |  |
| Paul Arias                  | Bluewaters Power Shell Energy     |                          |  |
| Dale Waterson               | Merredin Energy                   |                          |  |
| Patrick Peake               | Perth Energy                      |                          |  |
| Matt Shahnazari             | Economic Regulation Authority     |                          |  |
| Noel Schubert               | Small-Use Consumer representative |                          |  |
| Andrew Stevens              | Consultant                        |                          |  |
| Rebecca White               | Collgar Wind Farm                 |                          |  |
| Tessa Liddelow              | Shell Energy                      |                          |  |
| Kiran Ranbir                | ATCO Australia                    |                          |  |
| Daniel Kurz                 | SSCP Power                        |                          |  |
| Ajith Sreenivasan           | Robinson Bowmaker Paul (RBP)      |                          |  |
| Tim Robinson                | RBP                               |                          |  |
| Stephen Eliot               | Energy Policy WA ( <b>EPWA</b> )  |                          |  |
| Laura Koziol                | EPWA                              |                          |  |
| Shelley Worthington         | EPWA                              |                          |  |
| Isadora Salviano            | EPWA                              |                          |  |

| Apologies     | From                      | Comment |
|---------------|---------------------------|---------|
| Mark McKinnon | Western Power             |         |
| Dev Tayal     | Tesla Energy              |         |
| Andrew Walker | South32 (Worsley Alumina) |         |

| Item | Subject  | Action                |
|------|--|-----------------------|
| 1    | Welcome  |                       |
|      | The Chair opened the meeting at 12:30pm  |                       |
| 2    | Meeting Apologies/Attendance   |                       |
|      | The Chair noted the attendance as listed above   |                       |
| 3    | Minute of RCMRWG meeting 2022_10_13  |                       |
|      | Draft minutes of the RCMRWG meeting held on 13 October 2022 were distributed on 15 November 2022. Changes to the minutes were suggested via email prior to this meeting and are reflected in the draft included in the papers. The RCMRWG accepted the minutes as a true and accurate record of the meeting. |                       |
|      | Action: RCMRWG Secretariat to publish the minutes of the 13 October 2022 RCMRWG meeting on the RCMRWG web page as final.   | RCMRWG<br>Secretariat |
| 4    | Action Items   |                       |
|      | The paper was taken as read.   |                       |
|      | The slides for agenda items 5 to 10 are available on the webpage for the RCM Review ( <a href="https://www.wa.gov.au/government/document-">https://www.wa.gov.au/government/document-</a>  |                       |

### 5 Amended draft statement of policy principles

The Chair noted that on 23 November 2022 RCMRWG members exchanged emails suggesting that the objective of the draft statement of policy principles is unclear. The following key points were discussed:

collections/reserve-capacity-mechanism-review-working-group).

- The Chair noted that the issue had been discussed comprehensively at the 9 August 2022 MAC meeting and the 13 October RCMRWG meeting.
- In response to a question form Mr Arias, the Chair confirmed that:
  - the MAC's view that the objective of the policy is unclear has been provided to the Minister;
  - EPWA will include in the feedback to the Coordinator, and any further advice to the Minister, that the RCMRWG is concerned that the objective of the policy is unclear and that this makes it difficult to assess any options.
- The Chair noted that EPWA cannot change the Minister's draft statement and that the objective of the statement is to apply penalties to high emission technologies.
- Mr Kurz considered that the objective of the draft statement appears
  to force high emission technologies out of the WEM. However, it is
  not clear by how much carbon emissions are to be reduced and by
  when.
- Mr Shahnazari considered that the draft statement is about implementing a penalty for high emission technologies but that

having a penalty is not an objective in itself and that the statement should specify what the penalty is to achieve.

- The Chair noted that:
  - The Government's target is to reduce emissions by 43% by 2030.
  - The draft statement does not provide a timeframe. Therefore, it leaves room for the Coordinator to propose a transition timeframe that helps the Government to achieve its emission reduction targets.
  - The scenarios modelled for the RCM Review did not include any baseload fossil fuel plants from 2030 and no fossil fuel plants by 2050. These scenarios were agreed by the RCMRWG and the MAC.
- Mr Kurz noted that RCMRWG's feedback is that a clear objective for the penalty policy should be specified in the Minister's statement.

#### 6 Purpose of this session

The Chair noted that the purpose of the session is to capture the RCMRWG's feedback for the 13 December MAC meeting, including:

- further feedback on the options for the implementation of penalties for high emission technologies in addition to the feedback provided:
  - o at the 13 October 2022 RCMRWG meeting; and
  - via emails after the 13 October 2022 RCMRWG meeting;
- feedback on the two new options proposed by RCMRWG members via email.

#### 7 Feedback on options presented

Mr Robinson provided an overview of the RCMRWG's feedback including:

- feedback on the four options discussed at the 13 October 2022 meeting;
- two additional options proposed by RCMRWG members via email;
- feedback on the options for using any penalties collected to incentivise the entry of new firming technologies.

### 8 Implementation options revisited

Mr Robinson provided a summary of:

- the Minister's updated draft statement and the resulting assessment criteria for the options considered;
- the implementation options considered;
- the two new options proposed by RCMRWG members via email:
  - Option 5 implementing the penalty by requiring participants to acquire or create ACCUs or LGCs based on their emissions and

- surrender the certificates to a State body (slide 12 of the presentation);
- Option 6 applying emission thresholds for participation in the RCM similar to the application of thresholds in the UK capacity market (slide 13 of the presentation).
- the common parameters of all of the considered options; and
- the distribution of the collected penalty.

The following was discussed:

## **Penalty options**

• Mr Peake considered that the draft statement does not specify that the penalty cannot be passed on to customers but that, overall, the penalty should not increase costs to customers. If the penalty is used to increase the amount of renewable energy and firming capacity in the WEM that could decrease the cost of energy in the WEM. Therefore, part of the penalty could potentially be passed through to customers without increasing the overall costs to customers.

Mr Robinson noted that the modelling indicated that allowing the pass through of the penalty would significantly increase the cost of energy in the WEM. Mr Robinson agreed that maybe a small portion of the penalty can be passed through without increasing the overall costs to consumers. However, it would be difficult to determine how much of the penalty can be passed through without increasing overall cost to consumers.

- In response to a question from Mrs Bedola, the Chair noted that the penalty itself should not increase the cost to consumers but that other dynamics may increase costs outside of a direct impact.
   Mr Robinson considered that internalising a previously external cost increases overall financial costs.
- Mr Huxtable noted his concern about the use of ACCUs for the implementation of the penalty (Option 5) because the regime sits outside of the WEM. Therefore, it is outside of the control of Market Participants.

### **Distribution of collected penalty**

- Mr Sahnahzari Dr Shahnazari considered that not all firming technologies will require the same support to achieve commercial viability and that efficient use of support funds should be considered.
- Mr Peake asked if the mechanism would distinguish between batteries that provide firming capacity and batteries that provide Essential System Services (ESS).

The Chair noted that the draft statement referred to incentivising the early entry of firming technologies and considered that this indicates that the incentive is meant for firming technologies that would otherwise not enter the market, for example long duration storage.

Mr Schubert suggested that the incentive should be based on the length of time firming capacity can be provided.

Mr Price considered that the peak capacity product should be linked to the length of time capacity is needed but that firming relates to the proposed new flexibility product.

The Chair considered that the draft statement provided some leeway about the interpretation but that it is clear that the incentive is meant for technologies that would otherwise not enter the WEM.

 Mrs Bedola considered that Option 6 would likely lead to a higher Reserve Capacity Price that would incentivise new facilities to enter the WEM.

### 9 Analysis

Mr Robinson presented a comparative analysis of Options 1 and 6 that are proposed to be short-listed (slides 19 to 32). Mr Robinson noted:

- That the emissions data used for the analysis differs from the emissions data used in the UK as follows:
  - the emissions data used for the WEM facilities is based on the data used for the Whole of System Plan (WOSP), which is basically the emissions during a year divided by the MWh of electricity produced and which can vary from year to year; and
  - the emissions data in the UK reflects the inherent emissions rate of the individual facilities;
- any threshold or penalty would not be applied to biogas facilities because their emissions are not derived from fossil fuel;
- if Option 6 was implemented in the WEM, appropriate thresholds would still need to be determined;
- cogeneration plants are not included in the analysis because there
  was not sufficient information to derive the emissions related to the
  electricity production by taking into account the production of thermal
  energy; and
- under Option 1, coal fired power plants would incur the highest penalty followed by some of the gas fired power plants.

The following was discussed:

- Mrs Bedola considered that coal fired power plants could provide RoCoF Control Service but no other ESS. Mr Robinson agreed with Mrs Bedola.
- Mr Peake raised concerns about the implementation of thresholds that determine whether a facility receive Capacity Credits at all under Option 6. He considered that investors may not invest in the necessary plants if there is a likelihood that the facility won't receive Capacity Credits in the future.

Mr Robinson noted that:

- the intent is to set a Fossil Fuel Emissions Limit and a Fossil Fuel Yearly Emissions Limit to any new facility from a certain date and to not change these limits following that; and
- apply a separate Fossil Fuel Yearly Emissions Limit to existing plants that may increase over time.
- Mrs Papps suggested to consider an exemption from the penalty for facilities that are needed to fulfil the flexible reserve capacity requirement.

Mrs Bedola suggested that this could be achieved by applying the penalty only to the peak capacity product but not the flexible capacity product.

The RCMRWG agreed to discard Options 2 to 5 and discussed the further analysis for the remaining Options 1 and 6:

- The Chair noted that Option 1 could be implemented at any point in time but Option 6 could only be implemented with a three-year lead time considering the Reserve Capacity Cycle timeframes.
- The Chair noted that Option 6 would provide AEMO the most certainty about meeting the Reserve Capacity Requirement (RCR) because:
  - any facility that is affected by the threshold will not be accounted for when deciding whether the RCR is met; and
  - it does not matter when an affected facility actually exits the market.
- Mr Schubert suggested that AEMO could:
  - allocate Capacity Credits without pay to any facility that is affected by the threshold but not exiting the market; and
  - use the payments that would have otherwise been made for those Capacity Credits to fund firming capacity.
- The Chair considered that relying on unpaid Capacity Credits can impact reliability because these facilities would not be subject to refunds.
- Mr Huxtable and Mr Waterson noted their preference to further assess both remaining options.
- Mr Waterson suggested to consider a hybrid of Options 1 and 5 where a generator can choose between paying a penalty and offsetting the emissions.
- Mr Shubert raised concerns that Option 6 would not raise funds for incentivising firming facilities. Therefore, the needed firming capacity will need to be funded by consumers.
- Mr Peake, Mrs Papps and Mrs Bedola noted their preference for Option 6. The following was noted:
  - Mr Peake noted that he was against applying a penalty that cannot be passed on in the market and considered Option 6 more appropriate;

- Mrs Papps noted that her preference was subject to setting appropriate thresholds and suggested to adjust Option 6 to only apply to the peak capacity product;
- Mrs Bedola noted that, while under Option 6 no penalties would be collected, it would also remove the complexity of distributing the penalty.
- Mr Kurz considered that both options have significant impact on reliability. Option 6 would force out a lot of the capacity in the SWIS and the replacement of this capacity is highly contingent on new transmission construction and availability of investment. Therefore he believed that the commencement of the thresholds for option six would need to be set for a time when the facilities would exit the market for commercial reasons anyway.
- Mr Peake considered that the thresholds for Option 6 need to be set so they ensure that open cycle gas turbines are not run in place of combined cycle gas turbines.

The Chair noted that further analysis is required to develop the detail of Option 6, including:

- o the appropriate thresholds;
- o the treatment of open cycle and combined cycle gas turbines.
- Mr Shahnazari considered that Option 6 provides more certainty about the absolute emissions in the WEM but that sufficient revenue for renewable generators and flexible capacity must be available in the future.

The Chair noted that if the selected option does not collect penalties to incentivise firming capacity the methodology for setting the Reserve Capacity Price may need to be examined in the RCM Review.

#### 10 Next Steps

The Chair noted that the MAC will be provided with updated slides that reflect the RCMRWG's discussion.

# 11 General Business

No general business was discussed.

The meeting closed at 2:00pm