

Minutes

Meeting Title:	RC_2019_03: Method used for the assignment of Certified Reserve Capacity to Intermittent Generators – Workshop 2 (Amending Rules)
Date:	11 May 2021
Time:	9:30 AM – 12:15 PM
Location:	Online via Microsoft Teams

Attendees	Representing	Comment
Stephen Eliot	RCP Support	
Jenny Laidlaw	RCP Support	
Laura Koziol	RCP Support	
Adnan Hayat	RCP Support	
Sandy Ng	Australian Energy Market Operator (AEMO)	
Graham Miller	AEMO	
Rebecca White	Collgar Wind Farm	
Penny Ling	Metro Power	
Kei Sukmadjaja	Western Power	To 11:45 AM
Chris Binstead	Synergy	To 11:45 AM
Peter Huxtable	Water Corporation	To 11:30 AM
Luisa Thorburn	APA Group	
Matthew Bowen	Jackson McDonald	
Dora Guzeleva	Energy Policy WA (EPWA)	
Edwin Ong	AEMO	To 12:00 PM
Grace Liu	AEMO	
Jo-Anne Chan	Synergy	
Geoff Gaston	Change Energy	To 9:40 AM
Bobby Ditric	The Lantau Group	
Naomi Donohue	APA Group	
Arthur Panggabean	AEMO	9:40 AM to 12:00 PM
Mike Hales	AEMO	9:45 AM to 12:00 PM

Erin Stone	Point Global	From 10:00 AM
Patrick Peake	Perth Energy	10:30-11:15 AM

Clause	Subject	Action
4.9.5(c)	<p>Ms Grace Liu indicated that if an Intermittent Generating System is a component of a Scheduled Facility, the requirement in clause 4.9.5(c) is not consistent with clause 4.10.2 in the <i>Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020 (T2&3 Amending Rules)</i>, which specify that only components of Semi-Scheduled Facilities that are Intermittent Generating Systems are to be assessed under clause 4.11.2(b) by the Relevant Level Methodology (RLM).</p> <p>Ms Dora Guzeleva clarified that EPWA’s intent when developing the T2&3 Amending Rules was that Scheduled Facilities should not include an Intermittent Generating System component that was assessed under the RLM.</p>	
4.10.3A	<p>Ms Liu advised that the requirements for expert reports should not refer to “Planned Outages” and “Forced Outages”, because these were defined terms relating to whether AEMO’s approval for an outage to occur has been given. Ms Liu and Ms Guzeleva suggested that a more generic term should be used, or the capitalisation removed from the words.</p> <p>Ms Jenny Laidlaw noted that it was important to ensure it was clear that Consequential Outages should not be included.</p> <p>Mr Matthew Bowen recommended not using the same terms without the capitalisation, but instead using alternative wording such as “planned or unplanned outages”.</p> <p>Ms Laidlaw advised that RCP Support would amend the wording to avoid any potential misinterpretation of the clause.</p>	
4.11.3C	<p>Ms Liu noted that it was not clear when each review of the RLM must be completed.</p> <p>Ms Laidlaw understood the intent to be that the review should be completed by the specified date. Ms Laidlaw agreed that this was not clear from the clause and should be made explicit.</p>	
	Appendix 9	
	Part A: Introduction	
A.1	<p>Ms Liu noted that the timing of the application windows for Early Certified Reserve Capacity (CRC) and Conditional CRC meant that independent expert reports from that time cannot cover the required Reference Period, because part of the period would be after the application.</p> <p>Ms Laidlaw noted that RCP Support had discussed the issue with EPWA and her understanding was that Market Participants would</p>	

	<p>be required to provide the expert reports once the relevant information was available.</p> <p>Ms Guzeleva noted that EPWA had logged the issue and that timing for the provision of the independent expert reports could be addressed in a WEM Procedure.</p> <p>Ms Liu replied that AEMO would discuss the issue with EPWA outside of this workshop to ensure that AEMO had a head of power for including the relevant obligations in a WEM Procedure.</p> <p>Ms Liu also requested that the reference to “all required supporting information” in clause A.1(b) be linked back to clause 4.10.1, which specified the relevant information. Ms Laidlaw agreed with the suggested change and proposed to discuss the amendment with AEMO offline to ensure that the clause references covered Early CRC and Conditional CRC applications as well as applications for the current Reserve Capacity Cycle (RCC).</p>	
A.2	<p>Ms Liu noted that the definition for ‘Committed Candidate’ should be amended to explicitly include facilities in commercial operation. Ms Laidlaw and Ms Guzeleva questioned whether other references to committed facilities in the WEM Rules encompassed facilities in commercial operation but agreed that the drafting should make their inclusion explicit.</p> <p>Ms Liu asked if terms like Committed Standalone Candidate should also be defined in this section. Ms Laidlaw considered that the meaning of that term was clear, and was keen to avoid introducing more defined terms than were needed; but agreed to reconsider whether the suggested defined terms were warranted.</p>	
	Part C: Subroutine to calculate Loss of Load Expectation for a given Demand Profile	
	<p>Ms Rebecca White asked if the intent was to move to 5-minute granularity in the COPT with the start of security constrained economic dispatch on 1 October 2022.</p> <p>Ms Laidlaw noted that the historical output of Candidates would also need to be available with a 5-minute granularity. Ms Laidlaw was uncertain of EPWA’s intent but considered that if all the other aspects of the Reserve Capacity Mechanism (RCM) were changed to have a 5-minute granularity then the COPT granularity would probably change as well.</p> <p>Ms Guzeleva noted that there was currently no intent to move the entire RCM to a 5-minute granularity.</p>	
	Part E: Subroutine to allocate Fleet-Level Effective Load Carrying Capability to Candidates	
E.2	<p>Ms Liu asked whether it would make a difference if the Recipient Delta was calculated by subtracting the First-In ELCC from the Last-In ELCC. Ms Laidlaw thought that it should be possible to calculate the Recipient Delta that way, provided the subsequent</p>	

	calculations were adjusted accordingly, e.g. the final calculation of a Recipient ELCC would apply an adjustment to the Recipient's First-In ELCC.	
E.4	<p>Ms White noted that the variable 'r' was used for two different purposes in the equation in Step E.4 (i.e. to identify a specific Recipient and as an index in the denominator of the calculation).</p> <p>Ms Laidlaw and Mr Bowen agreed with Ms White's concern. Ms Laidlaw proposed to resolve the issue by either moving the summation in the denominator to a separate step or using a different index for the summation.</p>	
	Part B: Process Steps	
1.1	<p>Ms Liu raised a concern that an upgrade less than 10 MW in size might be classified as a Standalone Candidate under Step 1.1. Ms Laidlaw and Ms Laura Koziol agreed that this was a potential problem.</p> <p>Ms Koziol suggested that one possible solution could be to group the upgrade with its parent facility for the purposes of the Delta Method. Ms Laidlaw noted that this would require changes to Step 1.1. to create another trigger for allocating Candidates to a Candidate Group.</p> <p>Ms Liu suggested that another option would be to specify a MW threshold (e.g. 10 MW) for assigning Candidates to a Candidate Group. Ms Laidlaw proposed to discuss the options further offline with AEMO.</p> <p>Ms Guzeleva asked why the concept of Small Candidates was used rather than just specifying Candidates with a Facility Class (or indicative Facility Class) of Non-Scheduled Facility. Ms Laidlaw replied that the drafting had been structured to facilitate future changes to allow additional Candidates to be grouped, for example sub-10 MW upgrades.</p> <p>Ms Guzeleva suggested using the term "indicative Facility Class" instead of referring to a Candidate that is "proposed to be registered" as a Non-Scheduled Facility.</p> <p>There was some discussion about an upgrade to a Non-Scheduled Facility that might result in the Facility being reclassified as a Semi-Scheduled Facility.</p> <p>Ms Naomi Donahue asked how a hybrid facility comprising 20 MW of solar capacity and 100 MW of wind capacity would be classified. Ms Laidlaw clarified that if only one CRC was required the facility would be treated as a single Standalone Candidate.</p>	
2.1	<p>Ms Jo-Anne Chan asked how forced and planned outages should be accounted for with respect to independent expert reports, noting that different reports may use different methods which would lead to inconsistency. Ms Laidlaw expected that AEMO would provide some guidance on this matter in the relevant WEM Procedure.</p>	

	<p>Ms Liu noted that AEMO had been doing some work with its accredited experts to improve consistency in terms of the treatment of outages in expert reports. Ms Liu confirmed that guidelines were likely to be included in the WEM Procedure in future as part of implementing this Rule Change Proposal.</p> <p>Ms Sandy Ng considered that there was a need to consider Trading Intervals falling “on” the Full Operation Date. Ms Ng suggested replacing the words “falls after 8:00 AM...” with “falls on or after 8:00 AM...”. Ms Laidlaw noted that the drafting was based on the assumption that a Trading Interval was a half-hour period and so could not fall “on” a point in time; but proposed to confirm the current wording with the Panel’s lawyers.</p> <p>Mr Chris Binstead asked Ms Liu whether it was likely that the WEM Procedure would be updated ahead of the CRC application window opening in December 2021. Ms Liu replied that this depended on when the proposed Amending Rules commenced – if the changes were implemented in time for the 2021 RCC then the WEM Procedure would need to be updated before the CRC application window opened for that RCC.</p> <p>Ms Liu advised that the concept of Electric Storage Resource Metering, which is mentioned in Step 2.1(a), was going to be replaced by the concept of Facility Sub-Metering, because a Semi-Scheduled Facility might include a Non-Intermittent Generating System as well as an Electric Storage Resource.</p> <p>Ms Laidlaw noted that the Amending Rules to implement the Facility Sub-Metering concept had not yet been made. If the relevant Amending Rules were made and commenced in time, then the Panel would amend the drafting for RC_2019_03 accordingly.</p> <p>Ms Guzeleva advised that the relevant changes were going to the Minister for approval that day and were expected to commence on 1 July 2021. Ms Guzeleva offered to send RCP Support a copy of the proposed Amending Rules.</p>	
<p>2.2</p>	<p>Ms Liu questioned whether the drafting should include a definition of “parent Facility”. Ms Laidlaw noted that RCP Support had discussed the term with Mr Bowen and concluded that its meaning was unambiguous but would reconsider adding a definition for the term if AEMO considered there was a need to be more explicit.</p> <p>Ms White noted that some of the new ‘defined terms’ used in the Appendix were not included in the Glossary in Chapter 11.</p> <p>Ms Laidlaw replied that several terms had not been included in Chapter 11 because their use was restricted to Appendix 9.</p> <p>In response to a question from Ms White, Ms Laidlaw indicated that the Panel might consider including a Glossary in Appendix 9 if time permitted. Ms White noted that she had not found definitions for a few capitalised terms such as Fleet Interactive</p>	

	Effect and suggested either defining such terms or converting them to lower case.	
3.1	<p>Ms Liu suggested changes to Step 3.1 to:</p> <ul style="list-style-type: none"> • reflect that a Demand Side Programme could either be registered or proposed to be registered; • link to indicative Facility Class assessments under section 4.8A; and • clarify that Non-Intermittent Facilities will include facilities that are deemed to be in Commercial Operation. <p>Ms Laidlaw agreed with Ms Liu's suggested changes.</p>	
3.5	<p>Ms Liu noted that the ROUND() function under Step 3.5(a) did not specify whether a number was rounded up or down to one decimal place. Ms Laidlaw agreed to amend the step to provide an explicit definition of the function.</p> <p>Ms Ng noted that AEMO assigned CRCs to three decimal places and questioned whether DCOQ values should also be calculated to three decimal places. Ms Laidlaw replied that she thought the DCOQ values needed to have the same resolution as the COPTs but committed to confirm whether this was in fact the case.</p>	
3.7	<p>Ms Liu questioned whether increasing the resolution of the COPTs from 0.1 MW to 0.01 MW or 0.001 MW would necessarily improve the accuracy of the calculations, given the nature of the COPTs.</p> <p>Ms Laidlaw replied that RCP Support had not undertaken a detailed analysis of the benefits of increasing the COPT resolution and did not have estimates of the corresponding implementation costs.</p> <p>Ms Ng noted that AEMO had a concern regarding the grouping of Small Candidates. AEMO's analysis indicated that the ratio of Facility Average Performance Level (FAPL) over maximum capacity varies among small facilities (almost one order of magnitude) and the group FAPL/maximum capacity falls somewhere in between. The large discrepancies could be explained by the small facilities having different technologies and geographical locations. AEMO considered that the assignment of a group ELCC would be unfair for the facilities within the group.</p> <p>Ms Ng also noted that both the Last-In ELCC and First-In ELCC for the small group were equal to 4 and that a 1 MW resolution was quite coarse.</p> <p>Ms Koziol noted that the increased resolution of 0.1 MW in the Draft Rule Change Report should help to address Ms Ng's second concern; and that further increasing the resolution might provide additional benefits. However, some resolution problems were likely to remain even with an increased COPT resolution, because of the size of the Non-Intermittent Facilities and the</p>	

	<p>assumption that they were either fully available or subject to a full Forced Outage.</p> <p>Ms Laidlaw considered that further work could be done in future to investigate and address the resolution issues, but this would not be achievable for the 2021 RCC. Ms Koziol noted that the costs and benefits of any additional changes would need to be considered.</p> <p>Ms Liu suggested making changes to allow AEMO to increase the COPT resolution at its discretion. RCP Support and AEMO agreed to further discuss the options to address AEMO's concerns offline.</p>	
6.1-6.2	<p>Ms Liu noted that, when selecting 50 Trading Intervals with the highest loss of load probability, it was possible that two or more Trading Intervals could have the same loss of load probability; and suggested that Steps 6.1 and 6.2 should include tie-break rules to handle this situation.</p>	
11.1	<p>Ms Liu noted that currently the Historical Output values had a confidentiality status of Rule Participant Market Restricted.</p> <p>Ms Laidlaw replied that the draft decision was that the benefits of publishing this information outweighed the costs. However, the Panel was interested in submissions on the matter.</p> <p>In response to a question from Ms White, Ms Laidlaw clarified that the draft decision was not to publish the independent expert reports provided to AEMO by Market Participants but only to publish the relevant estimated Historical Output values from those reports.</p>	

The workshop ended at 12:15 PM.