RCP | Rule Change Panel

Wholesale Electricity Market Rule Change Proposal Submission

RC_2019_03
Method used for the assignment of Certified Reserve Capacity to Intermittent Generators

Submitted by

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Submissions on Rule Change Proposals can be sent by:

Email to: support@rcpwa.com.au

Post to: Rule Change Panel
Attn: Executive Officer
C/o Economic Regulation Authority
PO Box 8469
PERTH BC WA 6849

1. Please provide your views on the proposal, including any objections or suggested revisions.

Collgar Wind Farm is not able to support the WEM Rule change *RC_2019_03: Method used for the assignment of Certified Reserve Capacity to Intermittent Generators* without conducting an evaluation of the potential impact the proposed RLM can have on intermittent generators.

The Economic Regulation Authority (ERA), after its 2018 review of the Relevant Level Methodology (RLM), found that the current RLM had several shortcomings due to modelling errors in forecasting capacity values and inconsistency with the planning criterion of the SWIS.

The ERA has proposed a method that eliminates the modelling errors in the current method and provides forecasts of capacity values for intermittent generators consistent with the reliability planning criterion of the SWIS.

The ERA engaged the support of The Lantau Group (TLG) to assist in preparing the rule change proposal to amend the RLM, including the amendment of the existing model and its use to run several scenarios based on input data provided by the ERA.

The ERA has stated that the proposed rule change:

- will provide a more reliable forecast of the capacity contribution of intermittent generators in the SWIS than the current method and this will avoid over- or under-procurement of capacity due to the use of the current RLM;

- is transparent and technology neutral, and will enable market participants and new entrants to the system to replicate the method and assess the contribution of their capacity to the reliability of the SWIS and forecast the number of certified reserve capacity they can receive.

The results of the several scenarios modelled by TLG indicate that the proposed RLM may enable a fairer allocation of capacity credits to intermittent generators.

However, these results, derived by ERA's consultant TLG, are of limited use – market participants and new entrants to the system would be best served if they can replicate the proposed RLM and assess the contribution of their capacity to the reliability of the SWIS and forecast the number of certified reserve capacity they can receive (for their existing capacity and planned capacity additions). This would also better facilitate the achievement of the Wholesale Market Objective of transparency.

ERA should make the model and detailed inputs and assumptions (including adjusted meter data schedules and modelled facility output data for new entrant facilities) used by TLG for all scenarios available to market participants as soon as possible to enable them to adequately conduct their own evaluations and contribute effectively during the second submission period.

Components of the proposed RLM which Collgar deems crucial to the modelling of scenarios include:

- The identified *Candidate Facility groups*, allocation of the respective facilities within these groups, and associated meter data;
- Any disaggregation of *Candidate Facilities* into components of aggregated Facilities, and associated meter data;
- For each *Candidate Facility*, identify any Trading Intervals in the period identified in Step 1(b) of the proposed Appendix 9, where the Facility was directed to restrict its Injection under a Dispatch Instruction with a Dispatch Cap or Dispatch Target as published under clause [7.13.1x3(a)]; and any revised estimates of output made to the AEMO;
- The *Observed Demand* as calculated under the proposed Step 7, and individual components;
- The *Scaled Demand* as calculated under the proposed Step 7, and individual components;
- The *Storage_Available_Capacity* as calculated under the proposed Step 7, and individual components;
- For each facility group *c*, the *Scaling_Factor (c)* calculated in Step 12 of Appendix 9.
- The *Capacity Outage Probability Table (COPT)* as per proposed Step 15;
- The model which supports the calculation of the Loss of Load Probability and Loss of Load Expectation as per proposed Step 16; and
- The model which supports the calculation of the Calculation of the Relevant Level as per proposed Step 17.

2. Please provide an assessment whether the change will better facilitate the achievement of the Wholesale Market Objectives.

Collgar Wind Farm is not in a position to provide comment without evaluating ERA's proposed RLM.

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3. Please indicate if the proposed change will have any implications for your organisation (for example changes to your IT or business systems) and any costs involved in implementing these changes.

Collgar Wind farm estimates the implementation will require the development of an internal model to assist with forecasting and planning. Supporting systems, training and documentation will need to prepare to support the integration of the proposed changes into internal business processes. Collgar estimates that the sum of the costs of implementation could be in the range of $50,000 to $75,000.

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4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.

Collgar estimates the time to implement the changes would be between one to three months.