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Dear Ms Olesnicky

LOSS FACTOR METHODOLOGY REVIEW – ISSUES PAPER – SEPTEMBER 2016

Origin Energy Limited (Origin) welcomes the opportunity to comment on the marginal loss factor methodology issues paper.

Overall Origin supports AEMO's stakeholder consultation process which reviews the input assumptions used in the marginal loss factor methodology. Participant feedback is valuable for AEMO to enhance and refine the modelling assumptions ensuring a higher level of industry support for the final results. As part of this, earlier publication of marginal loss factors will benefit participants and should include a willingness by AEMO to discuss the MLF outputs and an ability to change if manifestly incorrect input assumptions are applied.

Origin is supportive of the use of a longer term, 5 year historical generation average when calculating generation levels against forecast demand. The current use of a 1 year historical period places too much emphasis on generator behaviour that was not representative of a typical or averaged pattern. For example large plant maintenance or baseline REC generation targets would be unlikely to occur in successive years.

In light of this, Origin would like to see analysis undertaken that removes outliers from the 5 year historical generation pattern in order to develop a more representative or likely generation scenario. For example, one of the 5 years may see a generator reduce output due to extensive flooding, or a one in twenty year maintenance requirement. These unplanned outages are not representative of a typical generation year and could be easily excluded or smoothed by examining generation patterns in other years. AEMO should develop a methodology, in consultation with participants, which details how they would account for outliers, i.e. which events would be removed from the 5 year historical average.

Origin is supportive of using a backcasting technique to determine the accuracy of published marginal loss factors (MLFs) across prior years. This is an effective way to test the accuracy of the input assumptions. Results from the study indicate that there are some large outliers in electrically weak parts of the power system, usually located adjacent to interconnectors¹. It would be helpful for AEMO to outline what parts or inputs to the methodology would need to be adjusted to ensure more accurate MLFs for generation assets located near to interconnectors.

Additional modelling input considerations

A potentially worthwhile addition would be to 'sense check' the historical 5 year generation forecast, with MT PASA data for plant closures or extended outages (such as an extended maintenance closure). For example the 5 year generation forecast would not take into account the closure of Hazelwood Power Station; however by examining MT PASA and consulting with relevant participants this would clearly show that an input adjustment was required.

¹ Loss Factor Methodology Review, AEMO, September 2016, p.6

Origin understands that MT PASA values can vary and update quickly depending on generator outage schedules. However this information would provide AEMO with the most likely availability outcome for all scheduled generation units as it is a requirement under the Rules (3.7.2(d)) for market participants to provide PASA availability values. Origin envisages the historical 5 year generation forecast as taking precedence over a potential change from an MT PASA input and we welcome AEMO developing a methodology on how this could be utilised. Origin would be happy to provide participant feedback on this methodology.

The issues paper discusses the potential inclusion of three generation forecasting methods in future years; Short Run Marginal Cost (SRMC), multiple generation forecasts and historical pre-dispatch cases to reflect load forecasts. Origin supports the evaluation of these three methods with a view that there is potential for additional modelling variables that would require participant consultation. For example, SRMC valuations could vary from the assumptions participants use. Any extreme variation could be reconciled with participant consultation.

In developing AEMO's third generation forecasting method using historical pre-dispatch values against load forecasts, Origin would seek clarification on the assumptions that would be used. Specifically would a time series or snapshot methodology be employed? It is understood that the development of these three methodologies are in their infancy and Origin looks forward to contributing towards their eventual inclusion in the MLF methodology.

Origin looks forward to the draft report scheduled for 8 December 2016. Should you have any questions or wish to discuss this information further, please contact James Gogan (02) 9503 5061 or james.gogan@originenergy.com.au.

Yours sincerely,



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