

9 November 2016

James Lindley Manager Systems Performance and Commercial Australian Energy Market Operator Submitted to <u>mlf.process@aemo.com.au</u>

Dear James

Re: Forward Looking Loss Factor Calculation Methodology Consultation 2016

Thank you for the opportunity to respond to the Forward Looking Loss Factor Calculation Methodology Consultation 2016. Stanwell understands that AEMO is proposing greater transparency of the calculation process, earlier publication of the loss factors and a variation to the use of historical data in the calculation methodology.

Transparency

AEMO has proposed to consult with industry on key inputs and assumptions used in the loss factor calculation. These include transmission network augmentations, inter- and intra-regional network power flow limits and forecast generation. In addition, AEMO proposes to publish modelling assumptions. Stanwell supports these initiatives although requests further information on what will be consulted on with respect to forecast generation. An appropriate balance must be maintained between a simple, transparent calculation methodology which can not be manipulated by participants and one which, through participant feedback, provides the most accurate forecast of loss factors.

With respect to the generation forecasts, Stanwell supports the current practice of publishing the forecast generation, thereby allowing generators to advise AEMO of any unrepresentative generation profiles. As well as the ability for participants to provide AEMO with a revised generation profile, consideration could be given as to whether AEMO should have the power to request a revised generation profile from a participant. This may be important if AEMO identifies a physical circumstance which was present in the historical data which is unlikely to be present in the future. This may include an unplanned outage of greater than four weeks.

The current and proposed method proposes to scale historical generation to match demand. Stanwell requests more information and transparency of this step in the calculation process. For example, Stanwell is concerned that in some cases the scaling process may not accurately reflect the reduced generation profiles of generators which are located near a generator which is expected to return from cold storage.

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Publication of loss factors

AEMO has proposed to provide an earlier indication of the loss factors by publishing the expected changes to average sub-regional loss factors in January and the Draft Forward Looking Loss Factor report by 1 March each year. Stanwell supports these initiatives as they allow better forward planning and more time to review the loss factors. Stanwell considers acceptable the trade-off of having to use less recent historical data.

Backcasting of loss factors

AEMO has proposed to conduct a backcast study at the end of each financial year to track the performance of the loss factor calculation process. Stanwell supports this initiative as it will increase transparency as to the effectiveness of the calculation method. In addition to publishing the results, Stanwell requests AEMO to provide some commentary explaining the differences.

Calculation methodology

AEMO has proposed to vary the way historical data is used in calculating loss factors. Stanwell understands the method proposed is to reduce a generator's scaled generation from the previous financial year (used by AEMO as a proxy for forecast generation) if the scaled generation exceeds that generator's five year historical average. AEMO has referred to this method as "applying an energy limit", however, it is not clear how this relates to the term "non-energy limited" used in section 5.5.2 of the procedure. It appears that the term "output limit" or "generation cap" may be a better term to prevent confusion.

While Stanwell supports AEMO's consideration of the feasibility of the scaled generation forecast, the method proposed may not be representative of the level of future generation.

For example, the graph below illustrates the historical generation of Tarong Power Station in the past three financial years, and the energy limit based on its five year historical average.



Tarong Power Station's most recent generation has exceeded its five year historical average, even without scaling. Under AEMO's proposed method, the generation from Tarong Power Station would be capped at the historical average. This is unlikely to be representative of the future, especially if demand is growing. This is likely to distort the loss factors calculated for Tarong Power Station and other generators in the vicinity.

As an alternative, Stanwell considers using a capping factor of *the greater of the five year historical maximum or the 95th percentile of the generator's nameplate capacity* would produce a more accurate loss factor.

Stanwell notes that a "buffer" is used in the formula for the generation forecast. The buffer is defined as "the factor to account for variations from the five year average and/or conditions where insufficient generation exists". Stanwell requests greater transparency of this factor including how it is determined.

Other issues

Stanwell notes the backcasted results in Appendix A and is concerned that the results are not more symmetrical for a given sub-region over the years. Stanwell would have expected that a non-biased

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methodology would produce an even distribution of over and under forecast loss factors for a given sub-region.

Thank you for consideration of Stanwell's response to the Forward Looking Loss Factor Calculation Methodology Consultation 2016. If you would like to discuss any aspect of this submission, please contact Win Arefta on 07 3335 7202 or Jennifer Tarr on 07 3228 4546.

Regards

Luke Van Boeckel Manager Regulatory Strategy Energy Trading and Commercial Strategy