10 May 2017

Ms Suzette Lizamore
Senior Analyst
Supply Planning
Australian Energy Market Operator
GPO Box 200
Melbourne VIC 3001

Dear Ms Lizamore

RE: Proposed Amendments to the Reliability Standards Implementation Guidelines

ERM Power Limited (ERM Power) welcomes the opportunity to respond to the Australian Energy Market Operator's (AEMO) Issues Paper (the Paper) for the proposed amendments to AEMO's Reliability Standards Implementation Guidelines published in April 2017.

About ERM Power Limited

ERM Power is an Australian energy company operating electricity sales, generation and energy solutions businesses. The Company has grown to become the second largest electricity provider to commercial businesses and industrials in Australia by load[1] with operations in every state and the Australian Capital Territory. A growing range of energy solutions products and services are being delivered, including lighting and energy efficiency software and data analytics, to the Company's existing and new customer base. ERM Power also sells electricity in several markets in the United States. The Company operates 497 megawatts of low emission, gas-fired peaking power stations in Western Australia and Queensland. www.ermpower.com.au

General comments

ERM Power remains concerned that AEMO is seeking to amend the Medium Term Projected Assessment of System Adequacy (MTPASA) process simply to achieve the outputs that were originally achieved by the Energy Adequacy Assessment Projection (EAAP) reporting process. At the time of the EAAP rule change consultation process ERM Power submitted the view that altering the frequency of the EAAP report publication timeframe from 3 monthly to yearly was a negative change to the Rules, given the changing system security and reliability conditions forecast in the National Electricity Market (NEM) by AEMO and others. It would have been a more optimal outcome to retain the EAAP reporting process, possibly amending the reporting frequency to monthly or every 2 months than the current proposal to amend the MTPASA process.

With regard to the issues raised within the Paper we offer the following comments;

[1] Based on ERM Power analysis of latest published financial information.

Proposed amendments to the MTPASA

ERM Power understands from the Paper that AEMO proposes to publish 3 different formats of MTPASA runs;

- 3 hourly MTPASA as per current with some additional information,
- Weekly MTPASA Dispatch Run, and
- MTPASA Reliability Run published at least monthly.

ERM Power's acceptance and support of AEMO's proposal to amend the publication of the weekly MTPASA to a weekly MTPASA Dispatch run, and a MTPASA Reliability run published at least monthly would be conditional on an effort by AEMO to maintain data and provide improvements to a number of detailed outputs of the current weekly MTPASA. These detailed outputs are set our below in our submission in the section 'Proposed Weekly MTPASA Dispatch Run'.

We believe the amended Reliability Standards Implementation Guidelines dated 30 March 2017 should be further modified to set out details of both the MTPASA Dispatch as well as the MTPASA Reliability run. Whilst the revised guidelines as issued sets out significant details with regard to the Reliability run, the revised guidelines contains no details regarding the Dispatch run.

Proposed at least monthly MTPASA Reliability run.

ERM Power supports AEMO's proposal to publish a new format MTPASA Reliability run on the basis that this will occur at least once every month. This makes up for the shortfall in important market information caused by the change in the timeframe of publication of the EAAP in late 2016.

We support the proposal to change how demand curves and forecast intermittent generation are derived to the use of at least 5 reference years. The use of a single reference year, as per current methodology is not supported as it fails to represent the naturally occurring variability in outcomes that are historically observable.

With regards to AEMO proposed use of 10% and 50% probability of exceedance (POE) demand curves for the calculation of Unserved Energy (USE) in this MTPASA Reliability run, we are concerned that this will result in a systemic bias to calculate a higher average USE value than that which would naturally occur.

The expected actual demand profile by its nature will result in outcomes that may vary from 0 to 100% POE, where each of these outcomes has the same probability of occurring. There is a high probability that for the higher POE levels, those between 60 to 100% the USE will be zero. In calculating an average annual USE outcome based on only 10 and 50% POE demand curves, the proposed process ignores all those POE outcomes where zero USE results. Statistically, in calculating an average annual USE outcome, AEMO's calculation process should represent the full range of expected USE outcomes, not just those outcomes where there is a higher probability of USE occurring. This could reasonably be achieved by the inclusion of 90% POE demand curves, or should AEMO determine that a slightly more conservative outcome is required, use of the 80% POE demand curve could be acceptable.

The weighting applied in the average USE calculation to the 90% POE outcomes should be equal to that applied to the 10% POE outcome, as each has the same probability of occurring.

Published reports for the MTPASA should include details of all input assumptions which could be published either with the MTPASA Outputs File or as a separate MTPASA Inputs File.

ERM Power supports AEMO's proposed rule change to allow publication of reported generation availability on a DUID basis. Individual DUID data is already provided by participants as part of their MTPASA data submission, therefore the data is currently available to AEMO, the only process change that would be required is with regard to the publication of this data.

Currently this information is generally only known between major NEM participants due to their sharing of plant overhaul resources, specialist contractors and strategic spares. Hence there is a large asymmetry in information between some participants, often to the detriment of smaller NEM participants and intermediaries. The current MTPASA review process provides the opportunity to correct this information imbalance.

We support the proposed factors to be considered for additional MT PASA Reliability Runs, as set out in Section 3.1.4 of the Paper and suggest the following factor also be included:

AEMO's intention to contract for the provision of medium term Reliability and Emergency Reserve Trader services.

Proposed weekly MTPASA Dispatch run.

ERM Power supports the ongoing publication of a weekly MTPASA Dispatch run with the following additional/enhanced output information provided separately:

- Forecast 10%, 50% and 90% demand data;
- Forecast intermittent generation output data;
- Forecast demand management data;
- Forecast scheduled generation availability data – both on a DUID and an aggregate regional basis;
- Forecast energy constrained and energy unconstrained generation availability data on an aggregate regional basis – note, this data should not include the impact of network constraints on generation availability as per the current weekly MTPASA, and
- Forecast interconnector limits, based on the inclusion of any planned network outages – note, forecast interconnector limits should be based on the use by AEMO of the co-optimised network constraint formulation, with generation output used in the calculation based on the generators reported availability value.

As set out earlier, the Reliability Standards Information Guidelines should be amended to adequately reflect the requirements of the weekly MTPASA Dispatch run.

Proposed amendments to the 3 hourly MTPASA

ERM Power supports AEMO's proposal to continue the publication of the 3 hourly MTPASA outputs, we look forward to clarification from AEMO with regards to the level of additional details that will be included as part of this consultation process.

Proposed EAAP intermittent generation

Section 2.2.2 of the revised Reliability Standards Information Guidelines indicates that with regards to intermittent generation forecast used in the EAAP, *Only one of the multiple ESOO reference traces is used for EAAP*, we believe that the intermittent generation forecast used in the EAAP should match those used in the MTPASA Reliability run. This would maintain a consistent approach and remove the potential for conflict in outcomes between the EAAP and the proposed MTPASA Reliability reports.

Conclusion

ERM Power is encouraged by AEMO's proposed changes to the MTPASA process to fill the void in market information left by changes to the EAAP reporting timeframe. However, to have full confidence in the proposal we require further detail than what is currently published by AEMO. The Reliability Standards Information Guidelines should reflect both the MTPASA Dispatch and Reliability runs and AEMO should issue a revised MTPASA Process Description document, with proposed changes clearly identified, as part of this consultation. It is difficult to support changes when the totality of the changes has yet to be provided.

ERM Power fully supports the proposed rule change to allow publication of reported generation availability on a DUID basis; this will remove a large asymmetry in information between participants often to the detriment of smaller NEM participants and intermediaries.

Please contact me if you would like to discuss this submission further.

Yours sincerely,

[signed]

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