

30th November 2018

Mr Andrew Turley
Manager, Integrated Energy Systems
Forecasting Division
Australian Energy Market Operator
GPO Box 2008
MELBOURNE VIC 3001

Submitted via e-mail to energy.forecasting@aemo.com.au

Dear Mr Turley,

NEM Demand Forecasting Methodology Issues Paper

The Australian Energy Council (the “**Energy Council**”) welcomes the opportunity to make a submission in response to the Australian Energy Market Operator’s (“**AEMO’s**”) *National Electricity Market Demand Forecasting Methodology Issues Paper*.

The Energy Council is the industry body representing 23 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia, sell gas and electricity to over ten million homes and businesses, and are major investors in renewable energy generation.

Discussion

The Energy Council appreciates AEMO’s consultation and transparency to ensure that stakeholders are fully apprised of the forecasting methodology which underpins so many of AEMO’s reports. The Energy Council notes that these reports, such as the Electricity Statement of Opportunities (“**ESoO**”) will be used by industry and other interested parties such as Government as the basis for their own analyses. Many decisions involving the expenditure of customer funds will be directly affected by these forecasts, such as AEMO interventions and Network expenditure justification. Therefore it is critical that the assumptions used are reasonable, the scenarios credible, and the methodology robust. In addition, it is important that forecasts are regularly compared against actuals and, if necessary, assumptions and methodologies changed to improve accuracy for future reports.

The Energy Council appreciates the detailed description of the sophisticated statistical approaches used by AEMO to determine the ultimate results. However it is inherently difficult to fully grasp the approaches by relying on the theory alone. The Energy Council recommends greater use of worked examples with real quantities to understand the significance of each step in the processes. This will allow a reader to fully understand how a final quantity in a recent forecast was derived.

Members have expressed to the Energy Council great interest in the regional maximum demand forecasts and how the 50% and 10% traces are statistically derived. Chapter 5 goes to some length to describe the process but again it is difficult to gain confidence without observing how real quantities were derived. AEMO could select a specific 10% regional demand forecast value produced recently, present each relevant input to its derivation and then methodically show every step in the process by which it was derived. This would be done in sufficient detail that a participant could repeat the calculation without having to access any further information and derive the same result.

The Energy Council also supports AEMO including the South Australian non-scheduled generation in the definition of operational demand, given the generation’s magnitude and inconsistent operation.

The Energy Council notes the methodology does not appear to cover:

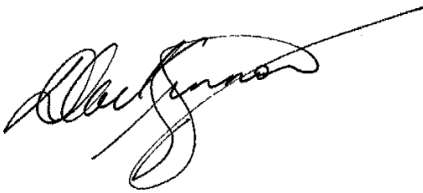
- the derivation and handling of demand-side response;
- short-term demand forecasting; and
- reviews of weather corrected actual performance of maximum demand forecasts.

Participants would benefit from a similar level of transparency in these matters. It is possible those matters are intended to be outside the scope of this document and may or may not be adequately explained in other documents. It would be helpful if AEMO included a high level architecture of all the related forecasting functions including a map showing where the details of each related forecasting function are documented. Each document should clearly begin by describing its scope and connection to other documents.

The Energy Council's members will provide more detailed comments on the assumptions, parameters and decisions made by AEMO in determining its methodology, but the Energy Council encourages AEMO to ensure the industry consultation process is ongoing, and in advance of the preparation of major reports such as the ESoO.

Any questions about this submission should be addressed to the writer, by e-mail to Duncan.MacKinnon@energycouncil.com.au or by telephone on (03) 9205 3103.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Duncan MacKinnon', with a long horizontal flourish extending to the right.

Duncan MacKinnon
Wholesale Policy Manager
Australian Energy Council