

Our Ref: D15/77213  
Your Ref: ERC0184

15 June 2015

Mr John Pierce  
Chairman  
Australian Energy Market Commission  
PO Box A2449  
SYDNEY SOUTH NSW 1235

Dear Mr Pierce

**AEMO Access to Demand Forecasting Information**

Thank you for the opportunity to comment on the proposed rule change which seeks to allow AEMO to collect information for the purpose of developing connection point forecasts for each region of the National Electricity Market (NEM).

We support the COAG Energy Council's proposed rule change and consider that independent connection point demand forecasts are important to producing better informed investment and operational decisions. We consider that it is important to clarify the regulatory framework to ensure that AEMO has access to information needed to prepare high quality, independent demand forecasts.

Attachment A to this letter responds to the questions raised in the AEMC discussion paper.

Should you have any queries regarding our submission please contact Ross Mitchell on 02 9230 9127.

Yours sincerely

Paula Conboy  
Chair

## **Attachment A - Answers to Consultation Paper Questions**

### **Question 1**

- a) Will giving AEMO access to information to develop transmission connection point forecasts enable AEMO to produce improved transmission planning forecasts in the NTNDP?**
- b) Will transmission connection point forecasts prepared by AEMO enable TNSPs to make better informed investment decisions?**
- c) Will the demand forecasts assist the AER in assessing TNSPs' regulatory proposals?**

### **Improved transmission planning forecasts in the NTNDP**

We consider that AEMO is the appropriate body to prepare electricity demand forecasts as it is already producing a number of annual publications which facilitate efficient transmission network investment in the NEM.

AEMO is already tasked with developing the:

- National Transmission Network Development Plan (NTNDP) which provides AEMO's view of the efficient development of the transmission network in the NEM for the next 20 years.
- National Electricity Forecasting Report (NEFR) which provides electricity consumption forecasts for each NEM region for the next 10 years.
- Electricity Statement of Opportunities which provides AEMO's assessment of supply adequacy in the NEM for the next 10 years.

We consider that having AEMO prepare both regional and lower level forecasts (including but not limited to transmission connection point forecasts) will result in better quality forecasts. It is important to note that in order for AEMO to undertake its role and to assist the AER, it will be necessary to understand demand at lower levels than transmission connection points, for example where the distribution network is heavily meshed this may include forecasts down to the zone substation level. We would encourage the AEMC to ensure that the rule as made includes sufficient flexibility to enable this to occur.

As discussed below, different forecasting techniques are used to formulate regional forecasts (top-down) as opposed to connection point forecasts (bottom-up). AEMO will be able to cross-check the top-down and bottom-up results, thereby reconciling any inconsistencies. This reconciliation process will enable more robust forecasts to be produced. In this way the production of demand forecast not only fits within AEMO's existing role but it also enhances the existing functions that it performs.

### **Better informed investment decisions**

We consider that AEMO's independent demand forecasts have already helped produce better forecasts of capital expenditure requirements. In turn, this should lead to better informed investment decisions.

For example AEMO's forecasts, in part, helped TasNetworks Transmission to reduce its forecast transmission capital expenditure over the 2014-19 regulatory control period

by \$48 million (19 per cent reduction).<sup>1</sup> Further, TasNetworks Transmission utilised AEMO's forecast to identify the connection points that did not require augmentation. A further example is in relation to the AER's recent assessments of the NSW and Queensland distribution regulatory proposals. The AER was able to confirm the validity of the distribution businesses' forecasts, by reconciling with AEMO's forecasts.

### **Improved demand forecasts will assist the AER in assessing TNSPs' regulatory proposals**

Improvements in AEMO's demand forecasts also provide the AER with access to high quality, independent data when assessing regulatory proposals from network businesses. Access to this data leads to more robust revenue determinations for network businesses.

As discussed in our response to question 2 below, we support AEMO preparing these forecasts because there are benefits from having an independent expert develop the forecasts from a perspective outside of the revenue determination process.

#### **Question 2**

- a) *Following on from question one, does the development of demand forecasts at the transmission connection point level appropriately sit within AEMO's national transmission planning function?***
- b) *Alternatively, should the AER develop these functions as part of its regulatory functions, should it consider them useful?***

### **Consistency with AEMO's National Transmission Planning Function**

As discussed in our response to question 1, AEMO is already tasked with producing a number of annual publications which facilitate efficient transmission network investment in the NEM.

Given AEMO's experience and demonstrated capability in this area we consider it is best placed to prepare independent connection point demand forecasts. The development of demand forecasts will complement AEMO's national transmission planning function. AEMO's 'bottom-up' connection point demand forecasts improve the robustness of data which AEMO produces as part of its national transmission planning function.

It is through the reconciliation of these 'bottom-up' demand forecasts and 'top-down' regional level demand forecasts that AEMO can improve the accuracy of their demand forecasts and thereby reduce the investment risk borne by consumers. Preparing these connection point demand forecasts will have the additional benefit of improving the accuracy of the data AEMO already prepares.

Having a body other than AEMO prepare these demand forecasts will not maximise the robustness of the demand forecasts. In this way the potential for better informed investment and operational decisions is only maximised where AEMO is responsible for preparing demand forecasts. Therefore in order to promote the NEO and pursue the long-term interests of consumers of electricity, AEMO should prepare demand forecasts.

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<sup>1</sup> AEMO, Submission to Tasmanian Government - Draft Tasmanian Energy Strategy (15 February 2015) <[http://www.stategrowth.tas.gov.au/\\_\\_data/assets/pdf\\_file/0010/98704/AEMO\\_Submission.PDF](http://www.stategrowth.tas.gov.au/__data/assets/pdf_file/0010/98704/AEMO_Submission.PDF)> p 3.

## **The AER should not be preparing demand forecasts at the connection point level**

Demand forecasting and the associated economic modelling is a specialised skill-set which is not retained within the AER.

The AER utilises demand forecasts in the revenue determination process. The allowed revenues for network businesses are partly based on the forecast expenditure considered necessary for investment. Forecasting higher demand growth will lead to a higher requirement for capex. Under the previous system the AER and the transmission network service provider (TNSP) would obtain separate consultant reports on the demand forecasts and debate the merits of the differing reports. This process was costly, time intensive and resource intensive.

We support AEMO preparing these forecasts as there are benefits from having an independent expert develop the forecasts, rather than having to inefficiently duplicate the expertise that AEMO has developed.

### **Question 3**

***It is arguable that AEMO can already use its information gathering powers in the NEL to compel the relevant person to provide information for transmission connection point forecasts. Should this be put beyond doubt in the NER?***

### **The proposed rule change will provide regulatory certainty**

We consider that this is a sufficiently important issue that requires certainty and are of the view that the only way this certainty can be achieved is through adopting the proposed rule change.

We consider that at present AEMO's national transmission planner (NTP) functions are only set out in the NEL in general terms that do not specifically require AEMO to develop connection point forecasts. In these circumstances, AEMO may have to rely on its information gathering powers to acquire the relevant information from parties and as such must establish that it needs the information in order to perform a relevant function.

The AER recognises that, to date, network service providers have complied with relevant information requests from AEMO on a voluntary basis. However, if network service providers did not continue to comply with AEMO's requests and AEMO's information gathering powers were challenged during a regulatory determination process, this would be disruptive and difficult to resolve within the AER's timeframe.

Given that network businesses have explicit planning and reporting functions under the National Electricity Rules (NER) it is possible that connection point forecasting would be considered an improvement to AEMO's functions rather than the performance of the function itself. In these circumstances AEMO may not be able to rely on their information gathering powers. The proposed rule change is necessary to put this beyond doubt.

### **AEMO's existing information gathering powers are not sufficient**

Our response below to question 7 also outlines why we do not consider that AEMO's existing information gathering powers are sufficient to perform their demand forecasting function.

#### **Question 4**

***As regional level demand forecast information is an aggregation of transmission connection point forecasts, should the NER also refer to regional demand forecasts as proposed?***

#### **Regional level demand forecast information is not the aggregation of transmission point forecasts**

We do not agree with the suggestion that regional level demand forecasts are an aggregation of connection point forecasts. We consider that these forecasts are prepared through two distinct forecasting techniques. Therefore it is important that as proposed, the NER also refer to regional demand forecasts.

Connection point forecasts are estimated at a very granular level using information on the movement of block loads and weather corrected historical demand levels. Regional demand is a complex econometric process including consideration of expected gross state product and includes global assumptions on energy efficiency and the uptake of new technologies. Forecasters within AEMO and the network service providers undertake a process of reconciling any differences between the bottom-up connection point forecasts and the regional demand forecasts. Connection point forecasts are often then adjusted (or 'trimmed') to take account of the regional forecast.

Given that AEMO has responsibility and established capability in preparing the NEFR, we consider that they are best placed to produce demand forecasts at the connection point level. AEMO's 'bottom-up' connection point demand forecasts improve the robustness of the regional level demand forecasts which AEMO currently prepares as part of its NEFR Report. Preparing these connection point demand forecasts will have the additional benefit of improving the accuracy of the data AEMO prepares in their NEFR report.

#### **Question 5**

***Should AEMO be given an express discretion to consult with the AER on the transmission connection point demand forecasts?***

#### **Question 6**

***Should AEMO be explicitly required to provide the AER with the transmission connection point forecasts if the AER requests them?***

#### **AEMO should be given express discretion to consult and share findings with the AER**

It is appropriate for AEMO to consult and share findings on connection point forecasts with the AER. We consider that consultation between AEMO and the AER is essential to the process of better informed investment and operational decisions by network businesses. The AER uses AEMO's demand forecasts to assess the connection point forecasts in the regulatory proposals of network businesses.

It is important to note that a network business that disagrees with AEMO's forecasts is free to submit an alternative forecast in their regulatory proposal. Our response to question 7 outlines the growing complexity in producing demand forecasts in this increasingly dynamic electricity market. AEMO is not producing a final or determinative demand forecast but rather is acting as an independent source of information for the AER and interested parties.

Throughout our revenue determination process we may need to consult with AEMO on their connection point demand forecasts. We may also need access to AEMO's

connection point forecasts. Giving AEMO express discretion to consult and share findings with us on these forecasts provides regulatory certainty that this process can take place to provide maximum benefit to the long term interests of consumers of electricity.

**Question 7**

***Should AEMO be given a rules based power to gather the information to develop the transmission connection point forecasts in addition to its information gathering powers under the NEL?***

**AEMO requires a rules based power to gather the information to develop connection point forecasts**

AEMO's information gathering powers in the NEL are set out in Part 5 Division 5. Under this provision AEMO can use either a market information order or market information notice to collect information from network businesses. We consider that these instruments will generally be effective in enabling AEMO to collect the information necessary to prepare demand forecasts.

We do not have concerns that AEMO will use clause 5.20.5 as a rules-based alternative to their information gathering powers. We consider that clause 5.20.5 will complement AEMO's information gathering powers by formally recognising AEMO's role in preparing demand forecasts. The proposed clause directs the attention of AEMO and the network businesses towards engaging and seeking to understand their input assumptions and forecasting techniques. This engagement will allow AEMO to produce more robust demand forecasts which will lead to more efficient investment and operational decisions by network businesses.

In the absence of the proposed rule change, AEMO's ability to engage with the network businesses and the ability of network businesses to cooperate with AEMO may be limited by a reliance on a prescriptive process.