21 January 2021

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AEMO Draft Forecasting Approach
Demand Forecasting Methodology Consultation

The Major Energy Users is pleased to respond to the AEMO request for input to its demand forecasting methodology Issues Paper.

About the MEU

The MEU was established by very large energy using firms to represent their interests in the energy markets. With regard to all of the energy supplies they need to continue their operations and so supply to their customers, MEU members are vitally interested in four key aspects – the cost of the energy supplies, the reliability of delivery for those supplies, the quality of the delivered supplies and the long term security for the continuation of those supplies.

Many of the MEU members, being regionally based, are heavily dependent on local staff, suppliers of hardware and services, and have an obligation to represent the views of these local suppliers. With this in mind, the members of the MEU require their views to not only represent the views of large energy users, but also those interests of smaller power and gas users, and even at the residences used by their workforces that live in the regions where the members operate.

It is on this basis the MEU and its regional affiliates have been advocating in the interests of energy consumers for over 20 years and it has a high recognition as providing informed comment on energy issues from a consumer viewpoint with various regulators (ACCC, AEMO, AEMC, AER and regional regulators) and with governments.

As a general observation, the MEU recognises that AEMO is continually seeking to enhance its practices and so improve the quality of its forecasts. Equally, the MEU is concerned that AEMO forecasting still exhibits considerable conservatism in its assessments of future of peak demand (10%PoE). The MEU accepts that some limited conservatism is appropriate but stresses that with recent changes (eg the

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Retailer Reliability Obligation) and expected new changes (eg from the ESB post 2025 review) in the market rules, the impact of excessive conservatism in forecasts will lead to significant but unnecessary costs for end users that are already expressing considerable concern at the costs of delivered electricity. In this regard it is worth highlighting end users have clearly expressed a view that they do not want increased reliability of supply if that increases costs and lower costs for electricity supplies are essential. The MEU considers that AEMO needs to improve their forecasting practices ensure that they do not exhibit excessive conservatism.

The MEU notes that the AEMO approach to assessing forecast consumption is different to that in generating forecasts of peak demand in that forecasts of consumption are based to some extent on segmentation of each major cohort (LIL, SME residential) but there is less segmentation used to assess peak demand. The MEU stresses that it is peak demand forecasts that have the greatest impact on costs that consumers face (particularly on network costs but also on generation supply) yet it is the demand forecast that exhibits less segmentation and hence less granulation of inputs.

With this in mind, what appears to be absent in the proposed approach is to access data directly from the parties that have much of the data available to them that AEMO needs. Specifically, the MEU notes that:

- Few, if any, end users of electricity trade directly in the NEM, and those that don't, trade through retailers
- Retailers, DNSPs and TNSPs (for direct connected end users) have very good data about end user usage patterns and the NMIs that serve them and therefore have the ability to match this data with exogenous factors impacting usage
- "Smart" meters generate a wealth of data which retailers and DNSPs use to better manage their activities and have access to significant granularity of usage by different classes of end users.
- While SME and residential cohorts are recognised as being different, it is pointed out that within each of these cohorts further granularity is needed to reflect the reality there are quite distinct subgroups within each. For example, within the "residential" category there are separate houses and units, some have rooftop PV and others don't, there are owners and renters, etc. Historically, trending was sufficient for forecasting processes but in more recent times, change is happening more frequently and at a faster pace, and this is having significant impacts on forecasts. This implies that greater investigation is needed in how each subset operates and this data is predominantly held by retailers, although DNSPs also hold significant data, especially in those regions where advanced metering is mandated.

As an outturn of high electricity prices, the MEU is aware that increasingly end users are seeking alternative sources of electricity and this trend is accelerating. This means that traditional approaches to forecasting are becoming less reliable and therefore not as tied to traditional measurement techniques. Specifically, using the Gross State

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Products (GSPs) for each state is becoming less of a guide to future growth in electricity demand of small to medium businesses (SMEs). The MEU members are aware that many of their suppliers (mainly SMEs) are implementing changes that allow them to reduce their usage of grid supplied electricity wherever they can but at the same time increasing their operations which, in turn, increases their electricity usage. This clearly supports a view that GSP might not be as good a guide to electricity future consumption as applied in the past. These observations support the view that greater disaggregation of end user cohorts is essential, and that retailer data should be used to better reflect the new dynamics.

The MEU also notes the AEMO assessment that there is price/demand elasticity, especially as prices increase. While the MEU agrees that this is probably true to some extent, the MEU members report that electricity is now so ubiquitous that this linkage is not as strong as might have applied in the past. Equally, the MEU considers that lower prices are unlikely to lead to increased usage.

Similarly, the MEU is of the view that greater segregation of residential consumer demand will enhance forecast accuracy. In particular, the MEU notes that while there is an assumption that as prices increase, residential consumers will modify their usage patterns, it is unclear how effective price signals are when this requires active involvement by consumers in adjusting heating and cooling set points.

With these observations in mind, the MEU considers that using more data from retailers will assist in generating better forecasts. This becomes more important when there have been identified different electricity use patterns on different days of the work week (eg Mondays and Fridays are different to the other week days).

Tariff arrangements also have a great impact on the impact of price sensitivity and the MEU is aware there is considerable discussion about tariff reform especially targeted at residential and small businesses. In the recent network revenue resets, there has been considerable pressure to make changes to network tariffs which will, in turn, impact retail tariffs. The MEU considers that AEMO needs to closely monitor these tariff changes and incorporate the effects of these in their forecasts. As this tariff reform will continue, it is important that AEMO look to moderate their forecasts to reflect the expected changes that will occur over time, rather than basing their forecasts on recent trends and traces.

The MEU points out that many stakeholders, vitally interested in the outcomes of the AEMO forecasting, have limited understanding of the intricacies of modelling for forecasts and the way data is combined and used in these models. With this in mind, the MEU recommends that AEMO appoints an independent consultant to review the detail of the forecasting methodology and for this independent reviewer to be involved in a three-stage process of stakeholder consultation. This consultation would include a session with stakeholders for the reviewer to hear stakeholders' views on their concerns and observations on the AEMO processes and a second session where the reviewer provides its views and where improvements could be made for stakeholders to hear their feedback and make comment. Stage three would be the release of a

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formal report from which AEMO would be required to implement any recommendations made by the reviewer.

The MEU is happy to discuss the issues further with you if needed or if you feel that any expansion on the above comments is necessary. If so, please contact the undersigned at davidheadberry@bigpond.com or 0417 397 056

Yours faithfully
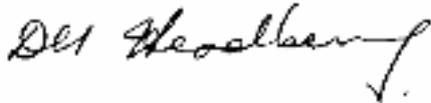
David Headberry
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