Integrating Price Responsive Resources – Technical Working Group Meeting 2



27 February 2024, 10:30am

The second working group meeting was held online on 27 February 2024. The attendees of the meeting are listed below.

| Member | Organisation |
|--|---------------------------------|
| Abhijith Prakash & Dani Alexander | UNSW |
| Ben Wilson | Simply Energy and ENGIE |
| Benjamin Pryor | Shell Energy |
| Caitlin Sears | ARENA |
| Christina Green | Energex |
| Claire Richards | Enel X |
| Con Hristodoulidis | Clean Energy Council |
| Constatine Noutso | Red Energy |
| Craig Memery | Public Interest Advocacy Centre |
| Dor Son Tan | Energy Networks Australia |
| Kenneth Hee | Tesla |
| Mark Majzoub | Aggregation Exchange |
| Matthew Kaspura | Origin |
| Sam Lynch | KrakenFlex |
| Sanket Wankhede | Energy Australia |
| Wei Lim | CS Energy |
| Cameron Gibson-Williamson, Magnus | AEMO |
| Hindsberger, Mohsen Khorasanv, Ana | |
| Garcia Castro, Rosie Elkins, Nicole Dodd | |

The AEMC's project team attended and is listed below.

| Name | Position |
|------------------|---|
| Andrew Lewis | Executive General Manager |
| Ben Davis | Project Sponsor |
| Rachel Thomas | Project Leader/Incentives Lead |
| Harrison Gibbs | Dispatch Lead |
| Sam Markham | Visibility Lead |
| Craig Oakeshott | Market Expert |
| Lily Mitchell | Project Lawyer |
| Ben Bronneberg | Project Lawyer |
| Jacqueline Price | Graduate |
| Dave Smith | Consultant (Creative Energy Consulting) |

The project sponsor acknowledged and showed respect for the traditional custodians of the many different lands across Australia on which we all live and work. We pay respect to all Elders past and present and the continuing connection of Aboriginal and Torres Strait Islander peoples to Country. The AEMC office is located on the land traditionally owned by the Gadigal people of the Eora nation.

At the start of the meeting, the 'competition principles' from AEMC's competition protocol and AEMC's 'consent to use of personal information' were read out.

The project lead outlined the TWG timeline and indicative areas for discussion for future TWGs.

The following items were discussed at the meeting:

AEMO forecasting

- AEMO provided an overview of the operational forecasting role in the National Electricity Market (NEM).
- AEMO explained that the operational forecasting team produces a forecast 5 minutes and 7 days ahead for both demand and variable energy resources. This informs market operation. Beyond one week, the forecasting team creates long-horizon forecasts and externally published plans e.g., the Integrated System Plan (ISP, published biennially) and the Electricity Statement of Opportunities (ESOO, published annually).
- AEMO described the evolving landscape of operational forecasting and potential challenges if price responsive resources (PRR) are not integrated into the NEM. In the future, the level of uncertainty and variability may exceed the control of AEMO.

Questions were raised around underlying demand and how AEMO would use visibility information, whether the problem is a transition issue versus a structural issue, and whether changing definitions may give AEMO the information they need.

AEMO visibility model

- AEMO provided an overview of their proposed visibility model. This included a worked example of what the market looks like in the status quo and what it would look like with AEMO's visibility model.
- A question was raised regarding low off-market demand response and how this is factored into AEMO forecasting.

Alternative visibility model

- Dave Smith outlined the alternative visibility model that was published on the AEMC website in December 2024. There are four main processes: (1) Retailers estimate DR, (2) DR Integrated into dispatch, (3) Retailer-level Demand Forecasting, (4) Modified FPP Algebra. (3) & (4) will be discussed in the incentives TWG.
- The AEMC project team explained the model is voluntary. Retailers choose to participate and they submit estimates of their own DR to AEMO through quasi-bids. In settlement, retailers would be rewarded on the accuracy of the DR estimates through a lower frequency performance payment (FPP). This would be the primary incentive to participate.
- Some TWG members raised concerns about the firmness of the retailers' intentions/bids. At an aggregate level, it may be difficult for a retailer to determine the DER and demand side as part of the total portfolio to put into AEMO's demand engine.
 - The AEMC project team noted that bids would not need to be perfectly accurate to improve efficiency. The key question is whether retailers would be able to provide information that would lead to an increase in forecasting accuracy relative to centralized forecasts.
- TWG members questioned the incentives and whether the benefits of this would outweigh the costs of participating and creating accurate forecasts.

• The AEMC project team explained that the AEMC is looking at a variety of incentives. However, this discussion will be held at a later TWG focused on incentives to support the overall rule change.

Discussion of key policy issues

- Sam Markham posed two main areas of discussion to the TWG: (1) can participants provide the information accurately? (2) what are the minimum requirements for participation?
- For area (1), the visibility lead asked three questions:
 - Are there other substantial PRR we should be specifically considering for visibility?
 - For each PRR, can it be forecasted? If yes, with what level of accuracy?
 - For forecastable PRR, over what time frames? Predispatch (up to 36 hours ahead) or ST PASA (up to 7 days ahead).
- The TWG raised that C&I have different interests from other customers and that beyond price and volume, a third dimension to consider is *time*. C&I customers may want to stay active for a longer period of time e.g., minimum reduction of 2 hours.
- There was substantial discussion around firmness and clarity of what resources can respond to price and which ones do not. E.g., controlled load hot water is most firm but solar PV is less firm.
 - The AEMC project team explained that the 'can' is important and consideration of what resources *can* respond to price signals. While there may not seem to be a large-scale problem now, PRR will increase significantly over time. This project is aimed at the likely future materiality.
- Regarding area (2), the TWG raised concerns about the firmness of demand side responses and the idea that a retailer could put forward a bid but not honour it in dispatch.
 - The AEMC project team responded that it is not so much about the accuracy being fed in, it is the accuracy relative to the alternative. As AEMO is attempting to forecast the customers of every retailer across the NEM, the base level of inaccuracy in the medium to long term becomes harder over time.

Next steps

- The AEMC project team thanked TWG members for their time and noted that the next TWG will be held on 4 March at 2pm. The focus of that TWG will be dispatch.
- It was noted that further discussion about incentives will be reserved for the TWG on 12 March at 10am.
- The AEMC project team will organise individual meetings with TWG members who have further insights and thoughts on the topics discussed.