

### 12 September 2019



Declan Kelly Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

Lodged online

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Dear Declan,

Ausgrid welcomes the opportunity to comment on the AEMC's draft rule to implement a wholesale demand response mechanism (WDRM) in the National Electricity Market (NEM).

We broadly support the draft rule and see the WDRM as an important step forward in the progress towards a true two-sided electricity market. We also support the review of the Demand Side Participation Information (DSPI) Guidelines that have also been incorporated into this rule change.

Ausgrid is the caretaker of a shared asset that will play a key role in the transition to a lower carbon economy. It will do this by unlocking greater competition in the energy sector and facilitating the development of new energy products and services, including demand response.

It is important that distributors such as Ausgrid have access to information pertaining to demand response activities (such as the WDRM and DSPI) for efficient planning and operation of the electricity network. We have therefore made some suggestions regarding access and transparency of information to distributors to assist network forecasting and management that we believe will help in achieving the benefits of a WDRM and the existing DSPI Guidelines.

Please refer to our submission below for further details. If you have any queries in respect of this submission, please contact Fiona McAnally (02 9160 3730 or fiona.mcanally@ausgrid.com.au) or Craig Tupper (02 9269 2277 or ctupper@ausgrid.com.au).

Yours sincerely

Iftekhar Omar Head of Regulation

# **Submission**

#### **General observations**

Ausgrid is supportive of the AEMC's draft determination which will establish a WDRM in the NEM. Energy markets are changing rapidly and customers want more control over how they buy, sell and consume energy. The AEMC's draft rule is a vital step towards creating a true, two-sided market.

Until now, consumers have had limited opportunity to participate in demand response in a meaningful, coordinated way that is likely to have real, long-term benefits in terms of reduced wholesale costs and deferral or avoided network investment. In stakeholder consultation for our 2019-24 regulatory determination consumers told us that they want to see more use of innovation and demand management options, not only to reduce the need to build additional capacity, but to defer or avoid replacing aged assets. The WDRM will complement our commitment to invest in innovative demand management technologies to reduce the need to replace ageing network infrastructure.

#### Implications for distributors

Through their licence conditions, distributors such as Ausgrid have obligations to manage the reliability, safety and security of their networks. In order to meet these obligations, it is important that distributors have access to information that allows them to efficiently operate and plan their networks.

While we are supportive of the draft rule, there are some amendments relating to information disclosure that we feel are necessary to support optimal network operation, system security and efficient planning of network investment. Around half of Ausgrid's system demand is attributable to large (>100MWh) customers so the WDRM could have a significant impact on how we manage the network.

The reasons for requesting more information are similar to those raised during the consultation for the DER register, where the AEMC found that there was a need for network service providers (NSPs) to have visibility of distributed energy resources<sup>1</sup>. Demand response provided via a structured market has the same implications for system planning, security and reliability. Maximum demand forecasting for distribution networks involves understanding customer load behaviour and trends on network peak demand days when peak price signals are more likely to occur. A better understanding of how customer load or generation is behaving in response to price signals would assist distributors by informing our load forecasting function and lead to better network investment decisions.

<sup>&</sup>lt;sup>1</sup> AEMC, Register of distributed energy resources, Rule determination, 13 September 2018, p16.

For these reasons we recommend the AEMC include provisions in the rules to ensure the following information is made available to distributors:

- Live information about locational WDRM dispatch to assist with network operation and system security
- 2. Historical information about WDRM dispatch to assist with forecasting and network planning
- 3. A minimum set of DSPI at the NMI level for registered participants responsible for that NMI through the DSP portal.

#### Live information

In its draft determination, the AEMC identified the reduced risk of load shedding as one of the benefits of active demand response<sup>2</sup>. Ausgrid supports this view.

To ensure that the maximum benefit of the WDRM can be achieved, we consider it is important for DNSPs to have access to live, locational WDRM dispatch information. This is required to allow Ausgrid to safely prepare its network for load shedding should it be required and Ausgrid is directed to do so. At present, when Ausgrid is directed to prepare for load shedding, it will be notified of the expected amount of load reduction needed as well as the duration. Ausgrid then prepares loads to be shed. Without access to locational WDRM information, there is a risk that the loads prepared for shedding will change suddenly as a result of demand response within the prepared loads, resulting in less load being ready for shedding when called for by AEMO. While Ausgrid acknowledges that one of the benefits of WDRM is a reduction of the need for load shedding, the ability to manage load in a timely and precise manner is an important part of managing the network.

Importantly, providing distributors with this information would not require disclosure of any confidential information regarding the commercial arrangements between Demand Response Service Providers (DRSPs), customers or retailers. We suggest that the following data to be made available to the relevant distributor:

- Demand response load scheduled to be dispatched within the relevant network by NMI
- Period of scheduled demand response by NMI.

## **Historical information**

To maintain a high level of forecast accuracy distributors would require historical information regarding the dispatch of wholesale demand response participants. This includes:

- NMI
- · Period of dispatch

<sup>&</sup>lt;sup>2</sup> AEMC, Wholesale demand response mechanism, Draft rule determination, 18 July 2019, p11.

- Demand reduction
- Baseline

The data is required for two purposes: network investment planning and pricing.

We require access to data by NMI as network forecasting and planning is done at the local spatial level and aggregate data does not provide the detail needed to accurately forecast future demand. For example, consider a substation zone in an industrial area containing numerous large customers participating in WRDM. Understanding when and the extent to which demand response is triggered is critical to forecasts that are used to estimate replacement or augmentation expenditure in that area. Without this information the accuracy of spatial demand forecasts will be compromised and could lead to inefficient network investment.

As well as planning for network investment, distributors would need detailed historical data to ensure WDRM outcomes are included in load forecasts for pricing purposes. Under revenue cap regulation, avoided DUOS charges associated with demand response will be recovered in subsequent years, so it is important that DNSPs have access to demand response data by NMI to appropriately adjust forecasts to reflect the reduction in customer demand. This will minimise the potential for price volatility caused by inaccurate energy forecasts.

In the draft rule it appears that distributors will have access, through MSATS, to whether a NMI has a DRSP associated with it and the baseline methodology for that NMI. However, Figure G.2 in the draft determination<sup>3</sup> indicates that the actual baseline data billing information, based on the difference between actual consumption and the baseline for each dispatch period, would not be available to the distributor. We request that the AEMC consider widening the access to data rules in cl 7.15.5 of the rules to include baseline and dispatch data as described above. The distributor would not require any commercially sensitive information concerning the pricing or billing arrangements between the DRSP/retailer/customer, only the avoided consumption data and period of dispatch.

We are aware that the draft rule requires AEMO to publish annual data with respect to DRSP-led activity, including the amounts of demand response dispatched, however this would be aggregate in nature due to confidentiality restrictions.<sup>4</sup> This is not enough to satisfy the spatial demand and energy forecasting and planning requirements of distributors, as described above.

<sup>&</sup>lt;sup>3</sup> AEMC, Wholesale demand response mechanism, Draft rule determination, 18 July 2019, p165.

<sup>&</sup>lt;sup>4</sup> AEMC, Wholesale demand response mechanism, Draft rule determination, 18 July 2019, p174.

#### **DSP** information

In our submission to AEMO's consultation on the DER register, we outlined that including demand side participation information (DSPI) in the DER register would assist distributors to meet their regulatory obligations.<sup>5,6</sup> AEMO decided that access to this information in current formats would not assist NSPs in fulfilling regulatory obligations.<sup>7</sup> We therefore welcome the AEMC's draft decision that AEMO review the DSPI guidelines, including the requirement to publish additional information regarding the DSPI in aggregated form by volumes and types of demand response.

We believe that the rule change should allow access to DSPI at the NMI level for registered participants with an interest in that NMI, including distributors. As part of the AEMO review of the DSPI Guidelines, a minimum set of DSPI data fields should be determined that are accessible to registered participants, including distributors, for the NMIs in their supply area, without disclosing any confidential commercial information. Including this requirement in cl 3.7D of the rules would assist distributors to better plan the electricity network for the benefit of all customers.

#### **Small customers**

Ausgrid agrees with the AEMC's view that all consumers should have the opportunity to participate in wholesale demand response,<sup>8</sup> particularly given price pressures over recent years. While we understand the AEMC is concerned that appropriate customer protections are in place for consumers participating in the WRDM, we encourage the AEMC to expedite the review of consumer protections so that small customers can participate in this market as soon as possible, paying particular attention to the situation of vulnerable customers. As we noted above, around half of Ausgrid's system demand is attributable to large (>100MWh) customers. Consequently, around half of Ausgrid's system demand is attributable to small customers.

Technology is available now that could facilitate small customers managing consumption, according to market requirements, through a DRSP. Establishing a pathway for small customers to participate in the WDRM would increase the scale and diversity (locational and temporal) of the demand response available and may offer significant additional benefits. Improved transparency and access to DSP information for small customers participating in demand side participation activities would assist in informing the costs and benefits of extending the WDRM to small customers.

<sup>&</sup>lt;sup>5</sup> <u>Ausgrid</u> submission: AEMO Distributed Energy Resources register information guidelines, March 2019, p8.

<sup>&</sup>lt;sup>6</sup> Ausgrid submission: Stakeholder feedback DER register information draft guideline, April 2019, p2.

<sup>&</sup>lt;sup>7</sup> AEMO, DER register information guidelines, Final report and determination, May 2019, p18.

<sup>&</sup>lt;sup>8</sup> AEMC, Wholesale demand response mechanism, Draft rule determination, 18 July 2019, p v.

# **Changes to systems**

The draft determination recognises that system changes will be necessary to facilitate the new rules. Ausgrid welcomes the opportunity to work with AEMO in developing the system changes and interfaces required to facilitate new data and processes associated with the rule change.

