

23 April 2020

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Dear John,

### **Second Draft Determination: Wholesale Demand Management Mechanism**

AusNet Services is pleased to have the opportunity to make this submission in response to the Commission's draft determination Wholesale Demand Management Mechanism.

We support the efficient and transparent inclusion of demand response in the electricity market and the work done to simplify the proposed rules. The less prescriptive baseline methodology, with an option for providers to nominate baseline methodologies, would likely encourage greater innovation.

However, our conclusion for this specific reform is that it is not clear that the introduction of the proposed mechanism is the right decision, without fully exploring the implementation costs vs benefits for consumers, and whilst the wholesale market design itself is in review. As the AEMC indicates, a move to a two-sided market would overtake this mechanism, as discussed below.

The AEMC should carefully consider the costs and benefits of incremental reforms to avoid mounting regulatory compliance costs which will ultimately be passed onto consumers. There needs to be a high degree of confidence that the benefits outweigh the costs of such reforms before they proceed. A key question when considering the benefits of this reform is the level of additional demand response that is expected to be identified as a result of this mechanism in the short term. Given stakeholder feedback received to date, there may not be a high level of additional demand response that would be 'unlocked' earlier by this reform to warrant the implementation costs of making this change and implementing the 2-sided market.

### **Progress toward a two-sided market**

The below quote from the second draft determination indicates that the Commission believes that over time the market should move toward a two-sided market.<sup>1</sup> Indeed, there are many references to the transition to a two-sided market in the draft determination, and the ESBs work through its 2025 market design process. It is now understood, through the COAG EC Communique, that a 2-sided market design is to be presented to COAG EC late in 2020.

*The Commission agrees that it is important for DNSPs to have sufficient information to allow them to provide network services. DNSPs are likely to need more information about the timing, location and capacity of demand side participation. This information will be necessary to manage the planning and operation of these networks.*

*However, until it becomes apparent how much wholesale demand response is provided through the mechanism, it is not clear whether information regarding its dispatch would meaningfully improve DNSPs ability to operate their networks. Also, given the significant development of wholesale demand response offers outside the mechanism, the Commission*

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<sup>1</sup> AEMC, Wholesale demand response mechanism: second draft determination, page 154

*considers information provision to DNSPs regarding demand side participation should be considered more broadly.*

*Over time, the Commission considers the wholesale market should move towards a two-sided market. This two-sided market would likely mean greater amounts of information are provided to the market. The development of a two-sided market should consider the appropriate avenues for providing DNSPs with the appropriate information to manage their networks.*

*As such, the second draft rule does not introduce provisions to provide more information on wholesale demand response to DNSPs.*

Having regard to this development, AusNet Services queries whether the cost of introducing the WDRM outweighs its implementation cost. Even without this knowledge, a number of stakeholders had submitted to the Commission their concern that the mechanism may not have cost benefit, given that demand response does participate already, albeit in a non-transparent and likely not best-practice manner.

However, significant costs to introduce a mechanism that will likely shortly be overtaken could be avoided. Importantly, the 2025 market design exercise should holistically consider the dependency of market design options on compatibility with network operations.

We accordingly request the Commission consider whether introduction of the WDRM, as an interim market feature, is warranted.

### **Network operations**

In our view, the Commission's analysis does not sufficiently explore the compatibility of the WDRM with network operations.

Throughout the review, various submissions have noted the need for consideration of how network operations may need to adapt to demand side participation in the energy market. AusNet Services made this point in its 15 January 2019 submission into the initial consultation paper:<sup>2</sup>

*Close consideration to the inclusion of network services in the demand response framework is necessary. Distributed energy resources are expected to play a large role in the provision of demand response services. These resources will be in a prime position to assist networks with locational network constraint issues, likely to be driven by capacity limitations or power quality issues. We recommend that any proposed mechanism consider the impacts of load switching on networks and the application of operating limits to demand response that are similar to AEMO's application of ramp up and ramp down limits to registered generators and market customers.*

The ENA similarly noted that:<sup>3</sup>

*The consultation paper appears to have little consideration for networks' need to monitor, manage and report on network constraints. Energy Networks Australia recommends that any proposed mechanism consider the impacts of load switching on networks, including influences on power quality and reliability.*

In response to the Commission's first draft determination, several submissions noted the implications for networks, generally acknowledged in the Commission's assessment. These submissions include Mondo, who noted:<sup>4</sup>

*Network service providers (NSP) will be impacted by demand response in beneficial, and also potentially adverse, ways. Providing NSPs with relevant data on demand response units*

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<sup>2</sup> AusNet Services, Submission: Wholesale demand response mechanism consultation paper

<sup>3</sup> Energy Networks Association, Submission: Wholesale demand response mechanism consultation paper, page 2

<sup>4</sup> Mondo, Submission: Wholesale demand response mechanism draft determination, page 4

*would aide in forecasting, network operation and identification of further demand response opportunities. We would support changes to the draft final rule that provide NSPs with data relevant to their network including NMLs, demand response unit capacity, bid volumes and dispatch instructions.*

And AusGrid, who submitted that:<sup>5</sup>

*It is important that distributors such as Ausgid have access to information pertaining to demand response activities (such as the WDRM and DSPI) for efficient planning and operation of the electricity network.*

Additionally, AusGrid also pointed out the implications for operation of load shedding schemes. We agree, and consider both Distribution Network Service Providers, and Transmission Network Service Providers require visibility on the location and activity of demand response (where relevant to their networks). If the network does not have visibility of a large customer's intention to reduce demand, in a particular dispatch interval, this could impact planned load shedding activities in the event this is required. It is likely to impact distribution level voltage and controlled load switching and the switching of transmission assets. It is not clear why this information cannot be shared with networks.

The identified key benefit of increased transparency for AEMO should be extended to Network Service Providers (NSPs). AusNet Services shares information on our network demand response activities for critical peak days with AEMO as this is important for operations, planning and system security. For the same reasons it is important that information regarding wholesale demand response is transparently shared with networks.

Rather than relying on market parties to sell information, perhaps it would be better if the benefits paid to the wholesale demand response service providers through the WDRM included the value of promptly sharing bid information with networks. The cost of providing transparent data should be incorporated in the incentive provided through the WDRM. AusNet Services recognises that demand response is already inherent in the market, for example via retailer arrangements with their customers, or where customers are exposed to spot prices. Today, networks and AEMO are blind to these arrangements. Nevertheless, there is risk that the networks cannot support all negotiated arrangements and maintain requisite reliability, security and power quality standards mandated by electricity law. Even if the WDRM only resulted in a transfer of these bilateral arrangements to the direct market mechanism, i.e. no additional demand response arises, the transparency would identify some of the risks that are present. For example, it may become apparent that transmission network limits / constraints are required to manage network voltages under certain scenarios involving demand response. The implications for the distribution network may be even greater, since participating loads (different to connecting generators) do not need to go through an 'application to connect' process or an equivalent in order to participate in the WDRM. We also note that as demand response capacity grows system stability issues are likely to grow in a non-linear and potentially exponential fashion.

### **Retail Market impacts**

AusNet Services is impacted by the changes proposed under the second draft determination for Wholesale Demand Response Mechanism. Specifically, changes to our systems interfacing with AEMO and retailers that would be necessary to support the addition of a new market participant category and associated meter data delivery and CATS/B2B functionality are not trivial. DNSPs and MDP would need to:

- register the wholesale demand response service providers for the purpose of the provision of metering and other data;
- update their register on receipt of CATS transactions from AEMO; and
- potentially transact site specific B2B transactions in support of these site registrations.

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<sup>5</sup> AusGrid, Submission: Wholesale demand response mechanism draft determination, page 2

These changes come at a time when the businesses are heavily engaged in a regulatory compliance programs to deliver wholesale system changes to support both the 5-minute and global settlement rule changes. The implementation of projects to ensure compliance with forthcoming obligations are well advanced with solution design completed and development work having commenced.

The introduction of a new market participant category, supporting CATS/B2B and meter data frameworks mean these functions would need to be reassessed, additional requirements to be considered and new commercial agreements established with our vendors and business partners for the new scope. There is a risk that the October 2021 go-live for the Wholesale Demand Response Mechanism will interfere with the delivery of these programs.

To ensure synergies in project delivery, if this reform does proceed AusNet Services recommends that the AEMC consider a delay of one year in the implementation date of this change to ensure the programs are able to continue and be delivered as planned, particularly given the market bodies are currently consulting on implementation timelines of various reforms to ensure less costly implementation during the COVID-19 pandemic.

If you have any queries about any of the positions outlined in this submission, please do not hesitate to contact Justin Betlehem on 03 9695 6288.

Yours sincerely

A handwritten signature in black ink that reads "C. Eddy". The signature is written in a cursive style with a long horizontal stroke underneath the name.

Charlotte Eddy  
**Manager Economic Regulation**