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Ms Suzanne Falvi
Senior Director
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Electronic Lodgement – ERC0186

Dear Ms Falvi

RE: Consultation Paper – Demand Response Mechanism and Ancillary Services Unbundling

We appreciate the opportunity to respond on the AEMC's Draft Determination – Demand Response Mechanism (DRM) and Ancillary Services Unbundling (ASU) rule change.

AusNet Services understands that the AEMC's reasons for not implementing the DRM change proposal is based on high implementation cost compared to benefits, also recognising that a level of market participation already exists. In our previous submission we noted that the DRM would facilitate greater levels of demand response, as it would facilitate a lower transaction cost for demand response access to the wholesale market. As the National Electricity Market (NEM) transitions to more dynamic and flexible electricity supply system such further facilitation of demand response may become more beneficial and the ability to reconsider this should be left open.

We currently deploy demand side solutions on our distribution network to maintain the network within operating capability and defer network augmentation. This includes both generation and demand reduction arrangements. Demand reduction is negotiated directly with customers. The regulatory regime requires Network Service Providers (NSPs) to consider non-network solutions and there are drivers for network service providers to deploy these solutions where they are most cost effective. It is unclear whether the establishment of either the DRM or ASU rule change proposals would be beneficial or detrimental to network businesses in leveraging demand response arrangements. We expect customers with demand response resources will target the most valuable demand response payments, which may be in the FCAS markets, wholesale market or from network service providers. As a result of these alternative markets, the availability of demand response for the networks when required may become less certain.

In principle, we see merit in the AEMCs ASU rule change draft rule, in removing barriers to accessing FCAS markets and facilitating the growth of rapidly dispatched demand response resources available. Rapid response demand side management is an emerging technology, and markets already exist in some parts of the world. Additional economic incentives will facilitate further innovation to grow this form of market in the NEM. The ASU rule change would drive customers to develop capability to respond with shorter response times measured in minutes and not measured in days, potentially becoming more valuable to networks.

As mentioned in our previous DRM submission network businesses have little visibility of retailer initiated demand response arrangements in terms of identifying these sites and quantifying the demand response activities being undertaken through retailer agreements. Unless we approach customers directly we have no knowledge of their potential demand response availability. Any new market role established to provide market ancillary service must be identified at the NMI level and network businesses would need to model the predicted demand response behaviour based on historical data.

As discussed above, a consideration for the AEMC in finalising the rule will be impact on NSPs ability to directly access demand management services. NSPs should have the ability to access cost effective services, and the mechanisms for this would need to be clarified, including whether NSPs may operate as market ancillary service providers.

Similar to comments we made in relation to DRM in our previous submission, the emergence of market ancillary service providers presents potential operational risk for the networks. Where market ancillary service providers and retailer initiated demand response arrangements are geographically concentrated, synchronised switching (i.e. simultaneous aggregated load switching) may lead to network implications.

In the short term, retailer initiated demand response resources and market ancillary service providers are not likely to be material enough to adversely affect networks, but over-time the amount demand subject to their control is likely to grow to the point where they cause voltage disturbance issues and adversely impact network reliability. These impacts would mirror the voltage disturbance issues caused by inverters on solar embedded generation that has caused the industry to implement “ramp rate” and randomisation requirements into inverters (e.g. AS4777-2015). Similarly, it will necessitate the need to establishment of a Load Management Protocol (or agreements with market ancillary service providers) to prevent synchronised Demand Response switching from adversely affecting network reliability.

However, unlike invertors that switch off when the voltage spikes, rapid switching by market ancillary service provider is unaffected by voltage spikes, leading to network tripping. Once the network is disrupted those market ancillary service providers can no longer participate in the ancillary service market. Therefore, the establishment of a Load Management Protocol to prevent synchronised ancillary service switching from interrupting the network would be required. In such circumstances, network businesses should not be liable for the market ancillary service providers lost opportunity costs in the event of a network outage.

In conclusion, we recognise a number of benefits arising from the ASU rule change in enhancing the incentives for demand response. At the same time however, there are a number of matters relating to the interaction with the operation of networks that need to be addressed.

AusNet Services is a member of Energy Networks Australia (ENA) and supports the ENA submission.

We welcome the opportunity to participate further in this Rule change development and looks forward to your Final Determination. Should you have any comments in relation to this response please do not hesitate to contact Justin Betlehem on 03 9695 6288.

Sincerely,

Kelvin Gebert
Regulatory Frameworks Manager