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A few words.

Energy in action.

Mr John Pierce

Chairman

Australian Energy Market Commission

Submitted online: www.aemc.gov.au

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Reference: ERC0186

Dear Mr Pierce,

Re AEMC 2016, Demand Response Mechanism and Ancillary Services Unbundling, Draft Rule Determination

AGL welcomes the opportunity to respond to the Australian Energy Market Commission's (the **Commission**) *Demand Response Mechanism and Ancillary Services Unbundling, Draft Determination* (**Draft Determination**), September 2016.

AGL is one of Australia's leading integrated energy companies and the largest ASX listed owner, operator and developer of renewable generation. Our diverse power generation portfolio includes base, peaking and intermediate generation plants, spread across traditional thermal generation as well as renewable sources. AGL is also a significant retailer of energy, providing energy solutions to over 3.6 million customers throughout eastern Australia.

In 2015, AGL established a New Energy division, with a dedicated focus on distributed energy services and solutions. AGL New Energy works with customers of all sizes (residential, business and networks) to understand their energy requirements and design tailored solutions. We offer customers 'beyond the meter' energy solutions, new and emerging technologies including energy storage, electric vehicles, solar PV systems, digital meters through our ring-fenced subsidiary business Active Stream, and home energy management services delivered by digital applications. We are also working with customers to develop a network services capability involving load management solutions

Demand Response Mechanism

AGL is very supportive of the Commission's Draft Determination, in particular the finding that there is no relevant market failure in terms of demand response to wholesale market signals that would warrant the introduction of the proposed demand response mechanism (**DRM**). Customers already have access to a range of products and services that allow them to realise value from what demand response they have available. The options range from taking a degree of direct spot market exposure (with a variety of tools and services available to assist a customer to manage that exposure) through to contracting demand response to other market participants (such as aggregators, generators and networks). As noted by the Commission, improvements in the availability, performance and cost of new technologies is likely to lead to the further market entry of new demand management products and services.

Quite apart from the DRM proposal failing this initial hurdle, AGL agrees with the AEMC that the particular mechanism proposed was itself problematic in a number of ways. It would be costly to implement, present opportunities for gaming, lead to distortions and inefficiencies in the spot and financial markets and, being an unscheduled form of demand response, would not be reflected in spot market prices (making it not dissimilar to the unscheduled demand response which already occurs). Without being able to identify a net benefit to consumers from the introduction of the DRM, the AEMC has made the right decision not to proceed with it.

Ancillary Services Unbundling

AGL is also supportive of the decision to proceed with the Ancillary Services Unbundling component of the original rule change request. This change will not require the Australian Energy Market Operator (**AEMO**) to incur significant implementation costs, and market prices and the availability of suitable loads and enabling technology will guide the entry (or otherwise) of competitive service providers into the FCAS markets. The Commission notes that deeper and more diverse FCAS markets have the potential to provide improved system security services, something that will complement the increased penetration of intermittent and non-synchronous generation that is occurring in the National Electricity Market (**NEM**).

The Commission asks what transitional and implementation issues would need to be addressed to ensure the rule change achieves what it is intended to. In AGL's view, a key issue will be modifying (as appropriate) the accepted means by which would-be providers of FCAS are able to participate in central dispatch.

Currently, AEMO requires all providers to conform to the Automatic Generation Control System (**AGCS**). Such a system is impractical and costly for an aggregation of load from Distributed Energy Resources (**DER**) to comply with as it would require a dedicated line at each connection point. This creates an effective barrier to entry for DER participation in FCAS markets.

We note that this issue exists even without the current rule change. AGL is currently deploying batteries in South Australia as part of an ARENA-backed 'virtual power plant' (**VPP**) project.[1] The VPP intends to test a number of different applications, potentially including participation in the FCAS markets. Conformance to the AGCS has already emerged as potential barrier to this particular application.

However there are other technological means available to facilitate DER participation in a centrally dispatched market and to deliver the data required to assure AEMO (and the market in general) of DER enablement and compliance. Frequency sensing devices installed either within the inverter or meter can be programed to respond automatically to frequency disturbances. Advanced software platforms allow the frequency response modes of a fleet of DER to be activated remotely, in a very short timeframe, in preparation for satisfying offers of frequency control that are bid into the FCAS markets. New Zealand's system operator already accepts the delivery of its 'instantaneous reserve' products (both fast and sustained) in this way.

Accordingly, AGL considers it very important to the success of this new rule and for DER participation in FCAS markets more broadly for AEMO, in consultation with stakeholders, to explore alternative means for accommodating DER in central dispatch. AGL hopes that the VPP can be leveraged to demonstrate modern DER frequency response capabilities, including the provision of high-grade performance data to AEMO to enable it to assure the delivery of frequency services by DER.

Small customer participation

The Commission notes that it does not intend to impose a minimum consumption threshold for load that can be aggregated and bid into FCAS markets so that even small customers will be able to participate. The customer arrangement would sit outside of the arrangement for the retail supply of energy and thus would not appear to be governed by the National Energy Customer Framework. The arrangement would, however, be covered by general Australian Consumer Law (**ACL**) protections. AGL agrees with the Commission that consideration of appropriate protections for customers participating in load control and demand management programs, and the extent to which these are already provided under the ACL or other framework, appropriately forms part of the program of work that the COAG Energy Council is currently undertaking to address the transformation of the energy market.

Should you have any questions in relation to this submission, please contact Eleanor McCracken-Hewson, Policy and Regulatory Manager, New Energy, on 03 8633 7252 or myself on 03 8633 6836.

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[1] https://www.agl.com.au/about-agl/media-centre/article-list/2016/august/agl-launches-world-largest-solar-virtual-power-plant

Yours sincerely,

Stephanie Bashir

Head of Policy & Regulation New Energy