

10 December 2015
Ms. Anne Pearson
Senior Director
Australian Energy Market Commission (AEMC)
PO Box A2449
Sydney South NSW 1235

National Electricity Amendment (Demand Response Mechanism and Ancillary Services Unbundling) Rule 2016 Consultation Paper

Dear Ms. Pearson

The Energy Networks Association (ENA) welcomes the opportunity to make a submission to the AEMC in response to the *National Electricity Amendment (Demand Response Mechanism and Ancillary Services Unbundling) Rule 2016 Consultation Paper* published by the AEMC on 5 November 2015.

The ENA is the national industry association representing the businesses operating Australia's electricity transmission and distribution and gas distribution networks. Member businesses provide energy to virtually every household and business in Australia. ENA members own assets valued at over \$100 billion in energy network infrastructure.

The ENA acknowledges that the consideration of this rule change request is an important part of a suite of rule changes in response to the 2012 *Power of Choice Review* and that it is intended to enhance demand side participation, a reform priority of policymakers since the 1990's.

Support for cost-effective development of national demand response markets

ENA notes that a high proportion of the benefits arising from the mechanism are attributed to network benefits, and that there has been an increasing focus by Network Service Providers (NSPs) on contracting for this form of network support. The interaction between the NSPs activities to meet its obligations and the new market require careful consideration in the design.

The principle benefit of the demand response mechanism (DRM) is facilitating large customers' participation in the demand response market and to enable load aggregators to be established independently of retailers to facilitate such operations. The DRM enables parties other than retailers to participate in the wholesale market. Third party aggregators who purchase demand response for network support services currently do not have access to the wholesale market other than via retailers. The rule change also has the benefit of broadening access to the market for ancillary services such as frequency control and ancillary services (FCAS) to parties other than retailers. The DRM has potential to provide benefits to residential customers, commercial customers and particularly to participating demand response customers. For residential and non-demand response commercial customers benefits may be provided through reduction in network costs where lower peak demand growth defers network augmentation and reductions in the wholesale electricity price caused by reduced demand.

ENA notes that the AEMC and Oakley Greenwood cost benefit analysis considers that the benefit of DRM is positive, although these benefits are not as large as could otherwise be the case in the absence of current generation overcapacity and are almost entirely from network benefits associated with reductions in network peak demand and associated reduced network augmentation. Existing

mechanisms such as cost-reflective network pricing and the undertaking of regulatory investment tests will also realise some of these benefits. There are potential benefits due to increased competition by large customers having options to enable demand response and hypothetical benefits from reduced future network augmentation and potential lower wholesale costs¹.

ENA notes the Oakley Greenwood modelling calculated potential total network benefits of the DRM at \$178.4 million (AEMO forecast) and \$117.8 million (AEMO forecast + cost reflective network pricing) and agrees with Oakley Greenwood that these benefits are likely to represent an upper bound of available benefits due to widely variable network capacity constraints in an environment where peak demand growth has declined in many locations in recent years.²

ENA notes the assessment that whilst there will be implementation costs of the DRM for retailers, AEMC seeks to mitigate these impacts by confining the DRM to large customers, utilising a voluntary approach and putting in place a staged approach to implementation.

ENA endorses the AEMC's proposed staged and voluntary implementation approach, which is expected to initially only impose mandatory costs upon AEMO to enable transactions and recognise the new role of Demand Management Aggregator (DMA). We note the proposition that implementation costs may initially be reduced for retailers managing DRM activities by manual processes. However in development of the design for the mechanism it will be important to also consider any cost and process implications to NSPs.

Need for network visibility of demand response resources to support reliable network operation

ENA supports initiatives that facilitate the introduction of demand response resources, on the basis that network businesses are able to independently contract these resources to undertake demand response to improve network reliability in constrained locations as well as supporting DRAs to source loads for other purposes. However, it is critical that network businesses are able to identify all significant demand response resources through retail market systems at the connection point level.

Although DRM provides an opportunity to improve network reliability it will also require clear frameworks to avoid operational and regulatory uncertainty including for network businesses in terms of:

- » challenges for network service providers coordinating network switching requests with DRAs operating under the DRM particularly if networks were temporarily reconfigured under emergency conditions or undertaking maintenance, which could inhibit dispatch of certain loads under DRA's control; and
- » managing the implications of switching large amounts of aggregated load by DRM providers in the longer term.

ENA notes that COAG Energy Council has identified the need for a work program to manage risks to power system operations from DRAs controlling large amounts of load.³ ENA will engage actively in this process and notes that it has implications for:

- » network infrastructure that is capable of withstanding expected levels of synchronised switching;
- » establishing a Load Management Protocol (or robustly implementable agreements with DRAs) to ensure synchronised demand response switching does not adversely affect system stability and reliability.

¹ Refer Oakley Greenwood report, p. 13.

² The modelling approach (pages 9 & 10 of the Oakley Greenwood cost benefit analysis) notes that it has not been possible within time and resource constraints to accurately account for the current headroom and growth rates characterising each network over the 20 years time period.

³ COAG Energy Council Communique, 23 July 2015, p.4.

- » the requirement for new or enhanced real-time monitoring and reporting systems for DRM activities for all potentially affected parties.

In the short term, in most locations, demand response resources are unlikely to be material enough to adversely affect system stability and reliability, but over time demand response resources may grow to the point where they do start to make material impacts. Therefore, it is essential the regulatory framework for DRM addresses any risks to electricity customers, by ensuring that system security and reliability cannot be compromised.

Development of an integrated suite of demand response measures

To reiterate, ENA is broadly supportive of initiatives such as establishing DRAs to increase demand side and FCAS participation by customers. However, the Oakley Greenwood analysis is only marginally positive and there are already mechanisms which could realise some of the network benefits quantified. In the interests of ensuring the most efficient and effective outcomes for customers, the ENA believes that new initiatives also need to take into account any relevant existing AEMO work programs in order to avoid unnecessary implementation costs and duplication.

In considering the development of the DRM, the AEMC should take into account, and clarify the potential linkages with other demand management mechanisms and programs. This should include those which are deployed by NSPs, including under explicit mechanisms such as the Demand Management Incentive Scheme, and implicit mechanisms including the NSPs published Demand Management Strategies, the Regulatory Investment Test process and forward planning via Annual Planning Reports.

Finally it is recognized that the DRM would commence in an environment where schemes and commercial arrangements already fund demand response. While a competitive market should achieve efficient pricing in the DRM, it will be important for the detailed scheme design to minimise the risk of demand response capacity providers being paid twice for the same service.

When the DRM is established, the cost effective procurement of demand management services to meet NSPs direct purposes may necessitate it acting in the capacity of a DRA. In its Draft Determination, the AEMC is asked to confirm initial officer advice that the design of the DRM should not preclude NSPs from operating as DRAs. This clarification was previously highlighted in working group discussions when the rule change and design were previously being progressed by AEMO.

If further information is sought on this matter, please contact Ms. Kate Healey, Director Regulation, on 02 6272 1516 or by email on khealey@ena.asn.au

Yours sincerely,



John Bradley
Chief Executive Officer