

10<sup>th</sup> December 2015

Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235

Submission lodged online at: [www.aemc.gov.au](http://www.aemc.gov.au)

Project Number: ERC0186

Dear Mr Pierce

**Demand Response Mechanism and Ancillary Services Unbundling  
Rule 2016 – Consultation Paper**

Snowy Hydro appreciates the opportunity to comment on the Consultation Paper. We believe there is no problem with existing and available commercial incentives for Demand Side Participation (DSP) in the National Electricity Market (NEM). There is no credible proof of a problem with the current market design, market signals and market frameworks do not provide the appropriate price signals and incentives for the uptake of DSP. We believe there are already very significant levels of DSP which is not transparent to Market Participants and Stakeholders in general. Our Rule change proposal, “Demand side obligations to bid into central dispatch”, if ratified will remove the misconception that there is insufficient DSP in the NEM. Hence Snowy Hydro’s position is that the Rules do not prevent efficient levels of DSP in the NEM and hence the Rule change should be rejected.

For example it is possible under the Rules for DSP to occur without any regulatory intervention, merely through commercial arrangements via the customer’s Retailer. It is also possible for scheduled loads to submit prices thus compete with scheduled generators. There is also nothing in the Rules that prohibits Network Service Providers (NSP) entering commercial arrangements with customers to avoid investing in network infrastructure.

It is sometimes mooted that different incentives of NSPs and Retailers may lead to inefficient levels of DSP. Snowy Hydro disagrees with this point as Retailers have incentives to use controllable load as part of their hedge book and will assess the value of it depending on the “firmness” the load provides. Of course the less controllable (or “firm”) the load is the less valuable it is. Should the controllable load be firm then the NSP and Retailer will both have mutual incentives to exercise their commercial agreement.

The critical question for Regulators to understand before contemplating any regulatory change is to accurately assess the willingness of consumers to change behaviour. Snowy Hydro believes consumers value their consumption of electricity more than the revenue obtained from a DSP contract and/or the avoided cost of electricity consumption. This is the key limiting factor in the level of DSP in the NEM.

The DRM proposal relies on the Demand Response Aggregator (DRA) submitting a hypothetical baseline consumption profile of what electricity these consumers would have consumed in the absence of their actual demand side response. The DRA is then paid the difference between the “Baseline” consumption and actual consumption multiplied by the Spot price. This is problematic and inefficient for the following reasons:

1. Another unrequired regulatory intervention

The NEM design gives equal opportunity/incentives on both the supply side (generators) and the demand side. It can be argued that the demand side already has information asymmetry advantages over generators. That is, unscheduled demand consumers are not required to provide their intention to curtail load through market bids. The DRM further skews this advantage to the demand side with no economic benefit. Snowy Hydro believes the benefits of the proposed DRM are overstated as there are already existing commercial arrangements in place that allow demand side response when it is economic. These arrangements include interruptible tariffs, scheduled and unscheduled demand response, and spot price pass-through.

2. Compromises the current market design and its Pricing Signals

As outlined earlier, the NEM design gives equal opportunity/incentives on both the supply side (generators) and the demand side. Snowy Hydro is increasingly concerned by claims that any action that reduces short term high spot prices must be in the overall interest of consumers. Current market prices are already providing little incentive for new investment in the NEM. The introduction of the DRM would further distort and dampen high Spot price signals. Longer term customer outcomes are best protected by undistorted pricing signals that provide the investment signal for ongoing investment in new assets.

3. Distortion to the Contract/Financial Markets

The introduction of the DRM would not reduce wholesale and retail market prices as espoused by the Rule change proponent. The Contracts market is dynamic and buyers and sellers would adjust hedging prices to account for exposure to the demand side response quantity. The net effect of the proposed DRM arrangements is to increase hedging risks for both generators and retailers. This increase risk would then lead to an increase in wholesale and retail electricity costs for end consumers.

4. The DRM would be very prone to gaming of the “consumption baseline”

The DRA is incentivised to maximise the difference between the consumption baseline and their actual consumption. It appears the AEMC have cited similar DRM used in the United States of America. Snowy Hydro notes that there are many different electricity market designs in the USA and hence like for like comparisons with the NEM are very difficult. Even with this fact, those markets in the USA which have a DRM are embroiled with disputes between DRM respondents and Regulators over the gaming of the consumption baseline to maximise payments to the DRM recipient.

5. The implementation costs of the DRM are potentially significant

Duplicate metering, increased regulatory oversight and working groups to establish the consumption baseline methodology are a number of tangible costs that will be incurred to establish the DRM. The DRM will also require rigorous monitoring by an institutional body to ensure there is no gaming.

Snowy Hydro strongly believes that the DRM is a complex solution looking for a problem that simply does not exist. The DRM is unjustified, distorts the current market design where both the supply and demand side have clear Pricing signals/incentives to either produce or to consume energy, would impose significant implementation costs, distort the Contract/Financial markets and benefit a small group of large consumers at the expense of a much broader group of consumers. Snowy Hydro strongly advocates that the DRM rule change fails to meet the NEM Objective and should not be ratified.

Snowy Hydro appreciates the opportunity to respond to this Consultation Paper. Should you have any enquires to this submission contact Kevin Ly, Head of Wholesale Regulation on [kevin.ly@snowyhydro.com.au](mailto:kevin.ly@snowyhydro.com.au) or on (02) 9278 1862.

Yours sincerely,



Roger Whitby

Executive Officer, Trading

Snowy Hydro's detailed responses to the issues outlined in the consultation paper are set out below.

#### Question 1 – Assessment Framework

The assessment framework should include broader considerations, these being:

- An assessment to determine whether there is a market failure that requires regulatory intervention via this Rule change proposal to rectify.
- Impacts on the secondary/contract markets.

One of the arguments put forward in support of the wholesale DSP proposal is that retailers are left whole while the costs of administering the mechanism will be less than the market benefits. No detailed analysis has been presented to justify the market costs of introducing the wholesale DSP mechanism. These market costs include:

- Economic costs of distorting the spot market price through payment of demand reduction subsidies to one class of consumer.
- The economic costs of establishing a market mechanism that encourages retailers to systematically over-hedge in the contract market (because they remain exposed to baseline energy consumption).
- Economic costs on the generation sector of the market from distortions to the spot market price and consequently the contract market, the effects of which should also be tested against the National Electricity Objective.
- Costs to all retailers of complex changes to their energy settlements and reconciliation processes, meter data management systems and to their billing systems that enable them to settle and bill on non-metered consumption during demand response time periods.

We believe the assessment framework must also incorporate these market costs.

#### Question 2 – Potential barriers to demand side participation relevant to this rule change request

The spot market provides short term price signals to both generation and demand. Demand is driven by consumers trading off the benefit of consuming and the cost of doing so. The benefit of demand response to a customer is therefore the avoided cost of paying the market price. This is the conventional market mechanism that defines the efficient level of demand response to price. We all make decisions everyday whether to make a purchase and enjoy the result, or avoid the cost if the price is higher than the value received. Introducing payments to consumers for load not taken is a subsidy for demand reduction and therefore distorts this market mechanism.

Snowy Hydro owns two second tier Retailers (Red Energy and Lumo). We believe there are no barriers to consumers providing demand side response.

Electricity retailing is a very competitive and small margin business. We therefore strongly disagree with the Rule proponents view that<sup>1</sup>:

*large customers argued that retailers lack incentives to induce customers to reduce demand because retailing is a volume driven business.*

The statement quoted above is a naive and misinformed view of the Retail market. Some Retailers compete on volume while others don't. The common theme is there are strong commercial incentives to negotiate with consumers of all sizes to derive mutually beneficial products.

If there is a market failure with current arrangements which result in a genuine barrier to demand side participation, then there first needs to be an assessment of the cost/benefit of removing structural impediments before introducing further regulation intervention. We believe the 5 minute dispatch and 30 minute settlement could be a structural issue that influences incentives for demand side participation.

The AEMC has commissioned a study to look at international precedents for demand side participation. We believe the Western Australian (WA) electricity market also provides insights into unintended consequences of introducing the Demand Response Mechanism. The WA arrangements have seen large consumers pocketing millions of dollars for demand side participation which have not been efficient. As a result it is our understanding that the authorities in the WA are looking to close this gravy trail. However, subsidies are notoriously hard to remove once they are in place. This should be a warning to the Commission.

### Question 3 – Questions on the overall DRM design proposal

The Demand Response Aggregator under the DRM would not be required to bid with similar obligations which are required for scheduled generation. That is, there is no requirement to bid in good faith and if dispatched from AEMO's central dispatch engine to comply with dispatch instructions. In essence the DRA is a non-scheduled market Participant.

Snowy Hydro's demand side intentions rule change outlines the problems and efficiencies to the NEM from degradation to the price discovery process due to non-scheduled loads. These inefficiencies include:

- Less accurate information from pre-dispatch forecasts to base operational decisions on;
- Less accurate information for AEMO to administer central dispatch;
- Less accurate information for AEMO to manage their system security and reliability obligations; and
- Less efficient pricing of financial contracts and derivatives linked to the electricity spot price.

The potential implementation of the DRA will exasperate these problems. We therefore, strongly recommend that DRA have the same obligations under the Rules as scheduled generation.

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<sup>1</sup> AEMC, Demand Response Mechanism and Ancillary Services Unbundling Rule 2016, 5 November 2015, page 11.

We have serious concerns about gaming of baselines. These gaming risks cannot be mitigated because once a baseline is known in advance of the next dispatch period the DRA have a free option to exploit this knowledge for commercial gain.

The DRM should not be justified as a mechanism to deliver benefits through the need for less investment of electricity transmission and distribution networks. The fact is there already exist regulatory processes which allow transmission businesses to utilise DSP where it is economically efficient. These regulatory processes include:

- Network support arrangements as part of a RIT-T assessment; and
- Demand management incentive schemes.

#### Question 4 – Accredited baseline consumption methodologies

As stated earlier, we have serious concerns with gaming of baselines. These gaming risks cannot be mitigated because once a baseline is known in advance of the next dispatch period the DRA have a free option to exploit this knowledge for commercial gain. It is a second order issue of establishing baseline consumption methodologies since no methodology would remove the fact that DRA will have prior knowledge of these baselines and hence the ability to maximise their pay-out prior to the next dispatch period.

#### Question 5 – Restrictions on the provision of demand response

Snowy Hydro supports the restrictions on the provision of demand response outlined in section 5.2.6 of the Consultation Paper which include:

- Artificially inflated historical usage or biasing the selection of the qualifying days;
- Where the load is experiencing an outage unrelated to the DRM;
- Moving demand from one connection point to another connection point for the purpose of an artificial demand response on one of the connection point.

Snowy Hydro suggests incorporating restrictions on using generation behind the meter to artificially decrease consumption at a connection point once the Demand Response notification has been issued by the DRA. This has been particularly problematic in the USA power markets.

#### Question 6 – Interactions with demand side participation mechanism

For consistency and to aid the price discovery process we believe the DRA must be scheduled with the same obligations that exist in Rules for scheduled generation.

Question 11 – Potential barriers to demand side participation in FCAS markets

There are no genuine barriers to DSP in the FCAS markets.

As evidenced by decreasing FCAS revenue to Service Providers since the formation of these Spot markets, the key issue is the lack of commercial return which limits participation in FCAS markets.

However, as demonstrated from the recent Regulation FCAS events in South Australia, higher FCAS spot prices have provided the appropriate signals for incumbents and potentially new service Providers to register to provide FCAS. Hence the competitive market is working as intended to signal scarcity and the need for new investment.