

Mr John Pierce
Chair, Australian Energy Market Commission
Level 6, 201 Elizabeth Street
Sydney NSW 2000



3 December 2015

Re: ERC0189 National Electricity Amendment (Demand-side obligations to bid into central dispatch) Rule 2015 [Proposed by Snowy Hydro]

Dear Mr Pierce

The Energy Efficiency Council (EEC) welcomes the opportunity to comment on the rule-change proposal from Snowy Hydro – ERC0189 National Electricity Amendment (Demand-side obligations to bid into central dispatch) Rule 2015.

The Australian Energy Market Commission (AEMC) consultation paper summarises Snowy Hydro's proposal as *"all market customers with market loads 30 Megawatts (MW) or greater that are responsive to, or intend to be responsive to, the electricity spot price would be required to become scheduled loads and participate in the central dispatch process operated by the Australian Energy Market Operator (AEMO)"*

The EEC strongly recommends that the AEMC reject this proposed rule change as:

1. The proposal would impede the development of demand-side participation (DSP):
 - Increasing the level of DSP in the National Electricity Market (NEM) is desirable to empower consumers and improve the efficiency of the NEM.
 - Numerous barriers to DSP limit the level of DSP in the NEM. The Commission has proposed actions to address some, but not all of these barriers.
 - Requiring loads over 30 MW to be scheduled if they are considering DSP would increase the cost of DSP. Adding further costs to DSP before the existing barriers to DSP are removed would curtail development of DSP.
2. There is currently no sound case to requiring market loads to be scheduled if they are considering DSP:
 - Almost every energy consumer in the NEM varies their demand for energy, for reasons such as maintenance or staffing schedules. Requiring consumers to only become scheduled if they are considering responding to price signals is inequitable and will not significantly improve demand forecasting.
 - The volume of DSP in the market is expected to remain small for some time. While we anticipate that the volume of DSP will grow over the next decade, there is no reason to impose additional costs at this stage of development.
 - There are numerous options to incorporate predictions of DSP into demand forecasting that would have significantly less impact than scheduling. For example, AEMO's proposed model for a Demand-Response Mechanism (DRM) would require the load to notify the market of their actions.
3. The proposed rule change will stifle competition, which will adversely affect consumers. The main beneficiary of this proposal would be companies, like Snowy Hydro, that can provide peaking generation services that compete with DSP.

Need for increased DSP

The AEMC's 2012 Power of Choice Review concluded that:

"While there is some evidence of uptake of DSP in the NEM over recent years, the efficiency of the electricity market can be improved by more active participation by the demand side." (page i)

The EEC believes that, while enabling DSP will deliver immediate benefits, including greater competition, the potential benefits will increase dramatically as generation technologies change and the over-supply of capacity in both generation and network infrastructure ameliorates. However, it is critical to immediately address the barriers to DSP so that the market for DSP can grow and mature over the next decade.

Numerous reviews have concluded that there are substantial barriers to DSP. The 2002 COAG Energy Market Review succinctly identified a number of barriers:

"The Panel found that there is a relatively low demand side involvement in the NEM because: the NEM systems are supply side focussed; the demand side cannot gain the full value of what it brings to the market; and residential consumers do not face price signals." (page 174)

There are a number of specific barriers that impede DSP that are relevant to this proposed rule-change, including:

- Energy consumers are normally focussed on matters other than DSP (e.g. manufacturing). Therefore, small increases in the costs and hassle of DSP, particularly transaction costs, can act as a significant disincentive to DSP.
- Consumers currently can't sell DSP into the wholesale energy market unless they make an arrangement with a retailer or face the complexity of the spot-market. The AEMC is currently consulting on a proposal for a DRM to address this barrier
- As a historical artefact, bids are put into the wholesale market in 5-minute intervals but settlement takes place in 30-minute intervals. This is much more critical for DSP than generation. While most generators charge high prices for generation in peak demand periods, the marginal cost of running generators at these times is normally quite low. In contrast, while DSP is generally offered at a lower price than peaking generation, the marginal cost for the DSP provider is much higher. Therefore, DSP providers run the risk of deploying DSP based on a high 5-minute bid price but being paid much less than the cost of deployment. There is currently no proposal to address this issue.

Impact of the Proposed Rule Change

Snowy Hydro's proposed Rule Change would significantly increase the cost of DSP. The costs of being scheduled are high, which is why facilities only elect to be scheduled if providing energy (or DSP) is one of their core functions. The consultation paper highlights that only a few pump storage facilities have elected to become scheduled loads. The proposed Rule Change, if adopted, would significantly curtail the development of DSP.

Proposed Rule Change is not justified

As the consultation paper notes, the vast majority of loads are not scheduled, despite significant variation in their energy use. We believe that it is inequitable to only require loads to be scheduled if they are considering responding to electricity prices, as opposed to responding to other factors such as periods of high staff costs.

Furthermore, we do not believe that the proposal would significantly improve demand forecasts, because:

- At a facility level, even if a facility has a normal load of 30 MW, they would typically only partially reduce their load during high price periods (e.g. shutting off refrigeration units for a short period of time).
- The aggregate level of demand-response is likely to remain small for some time as the market for DSP grows and matures.
- The level of DSP will be extremely small relative to the current level of variation in demand seen in the market, with most consumers varying their load based on public holidays, maintenance periods, weather, demand for product and so on.

Finally, even if the prediction of DSP was considered important, there would be a number of options to pursue this at much lower costs than scheduling loads over 30 MW that are considering DSP. As noted, AEMO's proposed model for a DRM would provide much greater insights into the level of DSP that are forthcoming with substantially less cost.

We believe that this Proposed Rule Change is without merit. The proposed Rule Change is anti-competitive, as there are well-known barriers to DSP that are not faced by supply-side providers. Adding costs to DSP, before the existing barriers to DSP are addressed, would stifle the development of DSP for no sound reason.

Responses to the questions in the Consultation Paper are set out on the following pages.

We look forward to continuing to engage with the AEMC on this matter. For further information please contact me on rob.murray-leach@eec.org.au or 0414 065 556.

Yours sincerely



Rob Murray-Leach
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Energy Efficiency Council

Question 1 The rule change request

(a) Is the lack of participation of market loads as scheduled loads in AEMO's central dispatch process, a material issue, in relation to the price discovery process or any other aspect of the market's operation?

The EEC does not believe that the lack of participation of market loads as scheduled loads in AEMO's central dispatch process is a material issue.

(b) Has the problem related to lack of participation by market loads as scheduled loads in AEMO's central dispatch process been correctly identified in the rule change request?

No comment

(c) If no, what problem or issue, if any, arise as a result of market loads not participating in AEMO's central dispatch process as scheduled loads?

No comment

(d) Does Snowy's proposed rule address the issue identified in the rule change request?

Snowy's proposed rule change is an extremely expensive way to address a non-issue.

(e) If no, are there other ways to address the issue identified in the rule change request?

The EEC strongly supports the development of improved demand forecasting methods. There are much cheaper options for improving predictions on the level of DSP, such as gathering information on the likely level of DSP that large customers might provide during periods of high electricity prices, as suggested by AEMO as part of the DRM.

Question 2 Market Impacts

(a) What would be the impacts, positive or negative, on the behaviour of market loads if they were required to become scheduled?

A requirement for market loads to be scheduled if they consider DSP would largely eliminate the development of DSP amongst larger energy users.

(b) What would be the impacts, positive or negative, on the behaviour of market participants, such as scheduled, semi-scheduled and non-scheduled generators, if market loads were required to become scheduled?

If market loads were required to become scheduled if they considered DSP it would impede the development of DSP, reducing competition during peak periods. This would likely increase prices in the wholesale energy market to the benefit of owners of existing generation.

Question 2 parts (c) - (h)

No comment

Question 3 Obligation on market loads

Although the Commission has not yet concluded that there is a material problem which needs to be addressed, if a material problem does exist what are stakeholders' views on the following:

(a) Is 30 MW or greater, the appropriate threshold for mandatory participation of market loads as scheduled loads in AEMO's central dispatch process?

30 MW is not an appropriate threshold for mandatory participation of market loads as scheduled loads in AEMO's central dispatch process, as market loads may be intending to provide far less than 30 MW of load reduction during periods of high wholesale prices.

(b) If not, how should the threshold for mandatory participation of scheduled loads be determined?

There should be no threshold for mandatory participation of scheduled loads.

(c) Given that market loads do not have a nameplate rating (whereas generators do), how should the size of a market load be determined (eg. average consumption, maximum consumption, single connection point)?

There should be no threshold for mandatory participation of scheduled loads, and so not methodology is needed to determine the size of a market load.

(d) Should a market load only be required to participate in the central dispatch process if it is, or intends to be, responsive to the electricity spot price?

Market loads should not be required to participate in the central dispatch process at all, but the idea of singling them out for mandatory participation if they are considering responding to the electricity spot price would undo all the work that the AEMC and others have undertaken to encourage the development of price-response in the energy market.

Question 3 parts (e) – (f)

No comment

Question 4 Incentives and obligations

No comment on any questions

Question 5 Provision of information

(a) Is it possible to address the issues raised by Snowy in its rule change request, through the provision of further information from market loads in relation to their intentions to increase or decrease their consumption at specific spot prices?

The provision of information from market loads on their intentions for price-response would be a much simpler way to address the non-issue raised by Snowy.

(b) If yes, what form would this additional information take?

No comment

(c) If additional information were to be provided, what mechanisms or incentives could be used to ensure that the information provided and updated by market loads reflects the market loads true intentions relative to its consumption under various spot prices?

No comment

Question 6 Implications on derivatives market

No comment on any questions.

Question 7 Technical requirements

No comment on any questions.

Question 8 Costs and benefits

(a) Under the current arrangements in the NER, what are the qualitative and/or quantitative costs and benefits associated with the current operation of the market given market loads are not generally scheduled, including but not limited to the market loads' ability to respond to changes in the spot price, the pre-dispatch process including the demand forecast, the central dispatch process, and system safety and reliability with respect to:

- market customers with market loads;
- generators, both base load and peaking generation;
- AEMO;
- retailers and their customers;
- other parties who participate in the market?

The current arrangements do not impose unnecessary costs of being mandatorily scheduled on energy users. As the benefits of mandatory scheduling are negligible, this does not impose significant costs on other parties.

(b) Under the proposed rule, what are the qualitative and/or quantitative costs and benefits associated with the operation of the market given market loads requirement to become scheduled, including but not limited to the market loads ability to respond to changes in the spot price, the pre-dispatch process including the demand forecast, the central dispatch process, and system safety and reliability with respect to:

- market customers with market loads;
- generators, both base load and peaking generation;
- AEMO;
- retailers and their customers;
- other parties who participate in the market?

The proposed rule change would increase the costs of large energy users considering DSP. This would:

- Raise costs for large energy users
- Impede the development of DSP, which would raise the wholesale price of energy and slow the development of a market for demand-side services that avoid unnecessary investment in network infrastructure.