# AEMC Reliability Frameworks Review – Directions Paper TEC submission May 2018

## Total Environment Centre’s National Electricity Market advocacy

Established in 1972 by pioneers of the Australian environmental movement, Total Environment Centre (TEC) is a veteran of more than 100 successful campaigns. For nearly 40 years, we have been working to protect this country's natural and urban environments: flagging the issues, driving debate, supporting community activism and pushing for better environmental policy and practice.

TEC has been involved in National Electricity Market (NEM) advocacy for the last 14 years, arguing above all for greater utilisation of demand side participation — energy conservation and efficiency, demand response/management and decentralised generation — to meet Australia’s electricity needs. By reforming the NEM we are working to contribute to climate change mitigation and improve other environmental outcomes of Australia's energy sector, while also constraining retail prices and improving the economic efficiency of the NEM — all in the long term interest of consumers, pursuant to the National Electricity Objective (NEO).

## Introduction

TEC’s interest in the Reliability Frameworks Review (RFR) is restricted to the discussion relating to wholesale demand response (WDR). We understand that in discussing WDR the AEMC is fulfilling its duty pursuant to recommendation 6.7 of the Finkel Review, ie:

> The COAG Energy Council should direct the Australian Energy Market Commission to undertake a review to recommend a mechanism that facilitates demand response in the wholesale energy market. This review should be completed by mid-2018 and include a draft rule change proposal for consideration by the COAG Energy Council.

We also understand that the AEMC’s primary objective in discussing WDR is in maintaining system reliability without the need for new generation investments to meet peak demand, thereby placing downward pressure on retail prices. TEC’s interest, however, is related to the environmental benefits of short term demand response (DR) and long term demand management (DM), which relate to three interrelated outcomes:

1. The potential for load shifting and shedding to result in lower emissions (especially where peak demand is met by fossil fuel generation).
2. Avoiding unnecessary generation and network infrastructure investments.
3. Helping to balance the output from variable renewable resources, allowing for a faster, more cost effective transition to a decarbonised grid.

While not having been a stakeholder in earlier DR reform proposals, TEC has a long history of involvement in DM, particularly as a proponent of the 2015 DMIS rule change. In view of the low uptake of voluntary DR in the wholesale market and the potential for WDR to reduce spot market prices and future generation investment, we are pleased to see the AEMC explore this important reform.

We mostly agree with the AEMC’s diagnosis of the problem or need; in particular, that the barriers to an efficient level of DR in the NEM may be more cultural and practical rather than regulatory. Either way, the evidence is clear that the majority of retailers aren’t participating voluntarily in WDR; and for those that are, they aren't making WDR opportunities available to the majority of their customers. If designed and implemented well, the introduction of a WDR mechanism into the market will ensure a much greater level of DR with direct and indirect benefits to consumers.

Essentially, TEC supports the introduction of WDM into the NEM; favours the AEMC's Option1; but suggests several amendments and clarifications of the AEMC's position in the Directions Paper.

## Option 1

In our understanding Option 1 has the following elements:

- The value of wholesale DR is transferred from the retailers (more specifically, the FRMP) to a third party that has facilitated the demand response - typically referred to as demand response aggregators (DRAs).
- The ability for third party DRAs to submit demand response bids to the wholesale market means that DR is able to play a role in setting the dispatch price.
- It would be compulsory for retailers to incorporate WDR settlement into the regular wholesale settlement and billing systems, and to permit their customers to participate in WDR with third parties.
- WDR would participate in the spot market only; emergency or reliability (RERT) DR would continue to be procured separately.

In our view, Option 1 is preferable to Option 2 because it doesn't require a separate meter or a multiple trading relationships (MTR) rule change. It also doesn't require particular loads to be electrically isolated and assigned to a DRA. Option 1 is also superior to Option 3, the idea of a DR fund, because the latter creates the impression that DR is fundamentally uneconomic and must be incentivised outside the wholesale market.

We consider, however, that Option 1 could be improved by applying to:

- Small as well as large customers, via aggregators.
- Scheduled in some manner (ie, bid in to the spot market up to 24 hours ahead) as well as non-scheduled (ie, notified ex post) WDR. It may be appropriate to begin with scheduled WDR for customer loads or aggregations over a certain threshold (eg, 1 MW). The AEMC should consider whether becoming scheduled in some manner would exclude small customers from participating in WDR under Option 1, and consider whether exceptions to scheduling are warranted.

## Responses to issues raised by AEMC

*Whether some of the other factors that limit wholesale demand response (e.g. behavioural biases from consumers) would limit this option's ability to facilitate wholesale demand response*

We would point to the success of AEMO/ARENA's DR trial over the 2017-18 summer (eg, Powershop's Curb Your Power program), as well as Mojo Power's earlier experience with a DR tariff as evidence that small as well as large consumers will respond positively to well-designed DR incentives.

*The level of changes to existing systems that would be required to facilitate this option*

It is our understanding that any IT or billing systems changes would be minor, and could be easily implemented alongside those necessitated by the implementation of the 5 minute rule change in 2021.

*What an effective methodology for establishing a baseline would be and who would be best placed to determine it*

Establishing a sound methodology for establishing baselines is obviously a critical part of WDR design. However, it need not be specified in the NER, but could instead be delegated to AEMO to develop and implement. We understand AEMO has undertaken significant amounts on work on baselines in the past, and that the AEMO-ARENA trial is also working to develop suitable baselines for use in that trial.

*Interactions with other market changes*

- Ahead or capacity market: Option 1 would create a greater incentive for efficient scheduled DR.
- RERT: We agree that "customers participating in a strategic reserve should not also be utilising wholesale demand response".
- NEG: We agree that "the development of the Guarantee will need to be done in concert with the development of a demand response mechanism for the wholesale electricity market…"

## Conclusion

Please note that, following the publication of the AEMC's final report on the RFR, TEC and PIAC intend, with one other co-proponent, to lodge a related rule change request to the AEMC.

There will be detailed design issues that TEC and its co-proponents hope to work through with the AEMC as the rule change process unfolds; in particular, the baseline methodology and how to handle scheduling and settlements. However, these are second-order issues. In 2015 the AEMC observed that "The cost benefit analysis undertaken by Oakley Greenwood indicated that … all customer groups would benefit from a DRM through a lower average wholesale price". There is no evidence that this is not still the case.

Given that the Finkel Review also highlighted the benefits for system reliability and decarbonisation of WDR, we would implore the AEMC to return to the good work it started in the 2012 Power of Choice final report and, with our help, finish the job.

Yours sincerely,

Jeff Angel
Executive Director