Total Environment Centre
1/99 Devonshire Street, Surry Hills, NSW 2010
Ph: 02 9211 5022 | Fax: 02 9211 5033
www.tec.org.au

Total Environment Centre

February 2017

Australian Energy Regulator

DMIS Consultation Paper

Mark Byrne
Energy Market Advocate
markb@tec.org.au

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 ten years, arguing above all for greater utilisation of demand side participation — energy conservation and efficiency, demand 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

As a proponent of one of the two 2013 rule change requests that led to the introduction of the new demand management incentive scheme (DMIS) rule (6.6.3) into the National Electricity Rules in 2015, TEC is pleased to see that the overly long process to introduce an effective demand management (DM) mechanism into the NER is finally close to completion. As was stated in the ISF report accompanying our rule change, such a mechanism will:

- Reduce the need for new generation capacity and related network infrastructure and lower peak pool prices.
- Thereby moderate and lower energy bills for consumers.
- Reduce carbon emissions.
- Assist the economy in the transition to decentralised energy technologies.[1]

Fortunately, the long gestation period of this reform has been accompanied by stable or declining peak demand across most of the NEM; and Victoria aside, there are few constrained areas of the distribution network. However, it is essential that the AER uses the next five yearly network revenue determination period (2019-24) to bed down an effective scheme and allowance mechanism to cope with potential future demand spikes – especially in the context of the increasing frequency of climate change-related severe weather events.

Turning to the consultation paper, TEC would first of all like to congratulate the AER both for taking the unusual step of reviewing the (in)effectiveness of the current DMIS/DMIA (in Appendix A); for its thorough consideration of the opportunities for demand management (DM) in the NEM and the current barriers to it; and for considering a wide variety of scheme design options, including broad-based and targetted and tariff and non-tariff DM.

Our remaining regret is that from the time when the AEMC published the draft specificiations for a new DMIS will now be some six years, reinforcing the perception among stakeholders that the pace of reform in the NEM is glacial, and the consequent need for a thorough overhaul of its governance and processes. We recognise that concurrent reforms have impacted or may impact on peak demand as the major driver of new network investment and higher consumer bills, but stress that **peak load management** (demand response, dynamic peak pricing, controlled loads, etc), **energy efficiency, battery storage** and **dispatchable and intermittent local generation** have important roles to play in an energy system that will be increasingly

[1] Dunstan, C. et al, Restoring Power: Cutting bills & carbon emissions with demand management. Institute for Sustainable Futures, University of Technology Sydney for the Total Environment Centre, 2013, 38.

dominated by distributed energy resources (DER). We also contend that other regulatory incentives do not adequately recognise and monetise these potential roles.

TEC does not have experience in the commissioning or delivery of demand management projects, so our responses are mostly of a general nature and focus on the consumer and environmental benefits. In this context, we are very happy with the AER's suite of proposals, including the asessment criteria for the DMIS and demand management incentive allowance (DMIA) – in particular the proposals to enhance competition via third party proponents. Our commments to the questions below are intended to give some direction where the AER has listed options for stakeholder consideration.

1. **Do stakeholders support our interpretation and proposed implementation of the new rules?**

   Yes. Given the fact that DM is driven not only by the need to constrain retail prices but also by the need to decarbonise the energy sector, TEC would prefer that the need for consistency with government climate and energy policies and consumer preferences for clean energy and energy conservation were explicitly recognised in the assessment framework, but we understand that the AEMC's and AER's (unfortunately) narrow interpretation of the current NEO precludes this.

   We consider that the assessment criteria could also explicitly recognise the need to minimise the risk of networks gaming the scheme, particularly around targets and capturing a share of the non-network benefits.

2. **Do you agree with our view on the main demand management incentives (or disincentives) provided under the regulatory framework and the potential issues associated with these incentives?**

   Yes. The capex bias is the most obvious DM disincentive. There may or may not be a causal relationship between lower augex proposals in the last round of revenue determinations and recent regulatory reforms (eg, the introduction of the CESS); this will become more apparent as networks respond to future increases in peak demand.

   As a recent example of information asymmetry, at TransGrid's information session for non-network proponents on Powering Sydney's Future in December 2016, there were complaints that TransGrid had not provided enough information to allow proponents to lodge compliant bids. This reflects the fact that DM projects are often promoted as short term augex deferrals.

3. **Do you see value in exploring the net-market benefit sharing mechanism further, despite the difficulties associated with measuring net-market benefits? If yes, what detail of guidance should we provide on calculating market-wide costs and benefits? Should we (and if so, how should we) establish a method for valuing smaller demand management projects in a way that reduces the administrative burden of applying the Scheme to these projects?**

   Yes. The onus should be on networks to prove the *amount* of net-market benefits, although the AER could publish a guideline to assist them. However, the AER should specify a fixed *value* for non-network benefits ($/MW) to apply to all networks in a regulatory period.

   In TEC's view, in order to kick-start the new DMIS for the first regulatory period (2019-24) the non-network benefits should be split equally between networks and consumers. Thereafter it may be more appropriate to apply a similar benefit sharing arrangement as applies to other incentives – ie, 30 per cent to networks, 700 per cent to consumers and other parties.

4. **Since the RIT–D already requires distributors to select the option with the highest total market benefit, should we (and if so, how should we) treat RIT–D projects differently under this type of Scheme (that is, under a net market benefit sharing mechanism)?**

Without evidence we cannot assume that (whatever its intent) in practice the RIT-D actually results in networks choosing the option with the highest total market benefit. As we saw recently in relation to SAPN's RIT-D for the Kangaroo Island cable replacement, there is no requirement for networks to disclose the detailed modelling underlying its consideration of alternative options. Without an effective DMIS in place we consider it unlikely that any network would choose an option that delivers the highest total market benefit rather than the highest benefit to the network itself.

The RIT-D does not allow networks to monetise the non-network market benefits, so (given the AER does not independently assess the merits of projects subjected to a RIT-D), projects worth $5 million or more would benefit from inclusion in the DMIS. This may also incentivise networks to consider non-network options earlier in the planning process, whereas the RIT-D is not always undertaken early in the planning process.

There are other problems with the RIT-D mechanism that render it ineffective (to date) in driving network or non-network DM. The $5 million RIT-D threshold is too high, especially for repex and in view of the much lower cost of most battery projects. It is also often undertaken late in the planning process and thus suffers from networks' cultural and financial bias towards capex over opex solutions. In the repex rule change process we are suggesting that the materiality threshold be reduced to $1 million with a truncated process for projects worth between $100,000 and $1 million.

5. **How might we best combine the mechanisms discussed in section 6 into an option that achieves the Scheme's objective?**

All four options have merit. The ideal scheme would combine elements of each. We note the work currently being undertaken by ISF with ARENA funding and the support of many networks that supports the need for more than one incentive to be in place to drive a shift from capex to opex.

We agree with the idea of an instant return with a 1.5 times uplift for DM projects, although this may only be necessary in the first regulatory period.

We also agree with linking DMIA spending with the DMIS. While it is critical that their R&D is also allowed to fail on occasions rather than being skewed towards short term practical applications, networks should also be incentivised to make projects work in the real world. For the next regulatory period, DMIA trial projects which are subsequently integrated into a broader DM program could be those which are subject to the uplift mechanism.

In view of the assessment criteria – especially the additional criterion of simplicity – TEC reiterates the proposal in Restoring Power for a combination of voluntary targets – whether by connection point or network-wide – and a standard formula for assessing and distributing the non-network market benefits. We favour "an ex-ante net market benefit sharing mechanism to allow distributors to internalise some of the positive externalities that demand management projects can bring."

Networks could be allowed to set their own targets based on a simple pro-rata payment such as $50,000 per MW of peak demand reduced per year (with the amount to be decided by the AER). The targets should be designed so that neither underperformance nor over-performance (say more than 150 per cent of the atrget) is rewarded.

6. **If you have views against applying any of the particular mechanisms discussed in section 6, please provide reasons to support this view.**

See above.

7. **How we might best give effect to or enhance the information and reporting requirements discussed in section 6.5?**

All of the post-project reporting requirements outlined in Table 10 are appropriate. We recommend the folowing metrics be required to be reported upon:

- Peak demand and energy consumption vs. business as usual forecast: How do peak summer and winter demand (MWp) and annual energy consumption (GWh p.a.) in the past five years compare to the business- as-usual levels forecast in their network pricing determinations?
- DM performance: How much have coincident peak summer and winter demand (MWp) and annual energy consumption (GWh p.a.) been reduced across the DNSP's network system in the current year as a result of DM options that the DNSP has supported over the past five years?
- Savings: By how much have the DNSP's capital and operating expenditure been reduced (or increased) as a consequence of points 1 and 2? By how much have customer energy bills been reduced in the current year as a result of points 1 and 2?
- Revenue and price impact: What has been the impact on DNSP revenue and network charges of DM options undertaken over the past five years?

However, as discussed in Restoring Power, DNSPs should also develop specific DM plans for each regulatory control period. These plans would feed into and would be adjusted according to the DNSPs annual planning process, as proposed and reported in the Annual Planning Reports (DAPRs). The plans would complement the DM Engagement Strategy produced under the Network Planning and Expansion Rule by outlining the specific DM options and projects are being considered and developed. Such plans would also assist in the RIT-D process. The plans would form the basis of budget allocations included in DNSPs' regulatory proposals.

8. **Which of the options discussed above in section 7 would best achieve the Allowance Mechanism's objective?**

   TEC does not favour Option 1: Minor extension to status quo, as by the AER's own admission, the current DMIA has been ineffective. While the investments by the Queensland networks' DM investments in the recent past were supported by the state government, the results from Endeavour, Essential and TasNetworks have been particularly poor and have likely been to the detriment of their consumers.

   All of the other options have merit and could potentially be combined. We recommend that the AER creates a pool composed of 0.1 per cent of total network revenues. Netowrks could propose the DM projects they wish to undertake in the next year, but they would need to compete against third party proponents for the funding. This option does, however, require the AER to take a very hands-on role in the DM space, although the funding process could be overseen by the DM Coordinator (see below).

We wish to make two final suggestions. One, TEC considers that the AER should be very clear about the extent of its *assessment* of projects and spending under the new DMIS and DMIA. Will it be a matter of checking that networks have adequately performed their administrative duties – as is effectively the case in relation to the current DMIA and the RIT-D; or will it be a proper merits review of the appropriateness and effectiveness of projects, including non-network proponent engagement and reporting?

If the AER considers that it lacks the resources to perform the latter role adequately, it should appoint an independent DM Coordinator to perform this task, funded by a small percentage (say 0.5%) of planned network DM expenditure. Indeed, having an independent DM Coordinator may be essential if the AER implements Option 3: a bidding mechanism, to ensure that the bids are asssessed by people with relevant expertise – which the AER does not appear to currently posess in relation to DM specifically. (Unlike the role of metering coordinator, which can be undertaken by any market participant involved in the metering services market, we recommend that the role of DM Coordinator be independent but funded out of the DM pool and answerable to the AER CEO and/or Board.)

Two, DM is mostly opaque to consumers, but it affects them both directly (eg, if the have load-controlled appliances) and indirectly (though lower capex translating into lower bills). Consumer-interactive DM could potentially include residential and business critical peak pricing tariffs, load control, demand response, energy efficiency, power factor correction and battery storage – all of which are relevant to the emerging decentralised energy economy. Therefore, beyond the DMIS and DMIA reporting requirements the AER should consider producing consumer-friendly information material about the scheme in principle and the annual or five-yearly performance of networks – starting but not ending with these being highlighted in the annual State of the Energy Market report. The AER should also strongly encourage networks and retailers to be more proactive about seeking consumer awareness of and involvement in DM projects.

Yours sincerely,

Jeff Angel
Executive Director