



public interest
ADVOCACY CENTRE LTD

Getting demand management right

Response to the AER's consultation paper on the demand management incentive scheme and innovation allowance mechanism

24 February 2017

Introduction

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit law and policy organisation that works for a fair, just and democratic society, empowering citizens, consumers and communities by taking strategic action on public interest issues.

PIAC's Energy + Water Consumers' Advocacy Program (EWCAP) has been representing the interests of low-income and other residential consumers of electricity, gas and water in New South Wales since 1998.

PIAC welcomes the opportunity to provide input to the Australian Energy Regulator's (AER) Consultation paper *Demand management incentive scheme and innovation allowance mechanism*.¹

The consumers PIAC represents are keen to see Australian Energy Markets evolve to meet current challenges and facilitate access to innovative energy services. Demand management will play a critical role in the future energy system.

PIAC supports moves to incorporate demand management as a tool to reduce peak demand and thus costs, reduce emissions and provide consumers flexibility to manage their energy supply. PIAC has previously submitted to the rule change.

The submission is informed by research PIAC commissioned from Bruce Mountain of Carbon and Energy Markets.²

Demand management rule change

There is general agreement that the previous scheme failed to incentivise networks to implement demand management projects. The AER has analysed why the previous scheme failed and the Institute for Sustainable Futures (ISF) has conducted extensive research on the benefits and barriers to demand management. ISF has also modelled the capital expenditure bias and what level the incentives should be set at to overcome this bias and the other barriers identified.³

In its final rule determination the AEMC decided to split the scheme into two parts; a demand management incentives scheme (DMIS) and a demand management innovation allowance (DMIA). The decision to split the scheme was done to improve clarity for the AER and the networks in applying the scheme. The DMIS will be applied to networks to encourage them to undertake expenditure on non-network options to increase demand management. The DMIA will provide funding to networks to undertake research and development, and to further develop demand management techniques and projects.⁴

The AER has sought feedback on the potential interaction between the incentive scheme and the Regulatory Investment Test for distribution networks (RIT-D), particularly as the RIT-D involves a

¹ AER, Consultation paper, *Demand management incentive scheme and innovation allowance mechanism*, January 2017.

² Carbon + Energy Markets, *Non-network demand management incentive scheme*, February 2016.

³ ISF, *DM Incentives scheme, Summary response to consultation paper*, February 2017.

⁴ AEMC, *Rule Determination National Electricity Amendment (Demand Management Incentive Scheme) Rule 2015*, August 2015, i.

cost-benefit analysis of projects. PIAC is of the view that there is unlikely to be much overlap as most demand management projects will be below the 5-million-dollar threshold that triggers a RIT-D.

The RIT-D is under review by the AEMC to expand its application to expenses to augment the network. We make similar arguments in our submission to that rule change and refer the AER to this submission in that regard.⁵

Demand management incentive scheme design

The AER has proposed four possible approaches to designing the DMIS and is open to a final scheme that combines aspects of all four.

Type 1: Mechanisms to target potential disincentives

The focus of this approach is to develop specific incentives to counter the current disincentives networks face in adopting demand management. However, the AER has not identified any preferred incentives in its consultation paper.

PIAC is concerned that the available financial incentives are likely to be so small in relation to a network's budget, that there is a risk that the amendments to the existing scheme will not make any difference in addressing the failure of the scheme. Research undertaken by ISF indicates that, to be effective, the financial incentive needs to be set at around between 50 and 100 kW per year. ISF recommends that the key measures of performance for the incentive scheme should be based on reducing annual peak demand on the network, as this drives new capital expenditure and thus overall costs for consumers.⁶ We support this recommendation to target peak demand, while noting that there is spare capacity across much of NSW networks.

Stakeholders at a recent forum indicated that due to the differing demand profiles and system constraints of the networks, the final amount would need to be tailored. ISF, on the other hand, recommends that, on balance, it would be more effective to set the same rate for all demand management across all networks. PIAC supports ISF's work in this area and recommends that if a consistent incentive rate is set for the first regulatory period (2019-2025), that this be formally reviewed to determine its effectiveness.

PIAC is concerned that the current network regulation, and particularly the nature of the rate of return on regulated assets earned by networks, proves too great a disincentive for networks to adopt demand management. While PIAC is supportive of a scheme to incentivise demand management, we have concerns that providing compensation to networks to forego the rewards for capex through a DMIS will be ineffective.

In light of the above, PIAC sees little merit in this form of scheme design within the current regulatory framework, especially if the incentive amount is not correctly set.

Type 2: Net-market benefit sharing

This method would provide compensation to networks to undertake projects that have positive externalities beyond the network, which the networks cannot capitalise on. Calculating the

⁵ PIAC, *Addressing key gaps in the regulatory investment test*, November 2016.

⁶ ISF see above no 3, 8.

positive and negative externalities beyond the immediate costs/benefits of a project is notoriously difficult. It would be likely that the quantification of net benefit would be costly both in terms of staff and consultants. This would negate any benefit in using this as an incentive. The administrative costs of checking the networks have meet their requirements would also be high.

Type 3: Mechanisms to promote competition

This approach seeks to encourage the networks to contract third party service providers who will use information provided by the networks to undertake demand management projects to address network constraints. This is likely to be done through competitions run by the networks. The incentives would cover the costs of developing the data systems and run the competitive market.

PIAC considers the underlying idea has merit and outlines further details of how this might be put into practice.

This approach would see a market, run by either the AER or another entity, for the selection and provision of non-network demand management services. It would operate based on the following key points:

1. A network would be invited to provide statements of opportunity where it envisages non-network management solutions might be possible or helpful in meeting customer demands on the network.
2. The AER (or an entity it delegates to) would compile these statements of opportunity and ensure they are available on a public register.
3. Networks or other service providers that seek to provide solutions to these opportunities would review the opportunities on the public register and be given an opportunity to develop solutions.
4. Networks/other service providers would submit their solutions for assessment by an expert panel appointed by the AER.
5. The expert panel would review the proposals and select the successful applicant.
6. Successful applications would be funded by the NSPs in whose networks the solution will be applied, and DMIS would provide the funding for this.
7. The AER would allow networks to recover the costs associated with the applicant's project, plus on-costs and a margin, associated with each successfully award application.
8. The networks would be responsible for contracting the successful provider and will be responsible for ensuring delivery by that provider.

While there will be a separate DMIA for innovation, this competitive process will provide regular funding opportunities for networks and third parties to develop demand management solutions and be rewarded for implementing those solutions. This would be a composite approach, based on a similar competitive process for innovative low carbon projects in the UK.⁷

PIAC is of the view that this approach will result in the following benefits:

- **Competition:** this model would create an open market for the supply of demand management and non-network solutions. This would stimulate innovation and creativity.

⁷ Ofgem, *Electricity Network Innovation Competition Governance Document*, 2013.

- **Transparency:** this scheme will make it clear which networks are actively seeking to implement demand management and which are not. It will also make it clear which networks and others are becoming capable in providing these services. Those that are not active will become obvious and the AER can then seek to understand why they are not, and how to encourage greater participation.
- **Economies of specialisation:** by creating an open market for the supply of solutions, it will be possible for successful third parties to further develop their capacity and market share.
- **Implementation:** this would not be an expensive or difficult scheme to administer. Lessons learned from Ofgem can be used in designing this scheme.

Type 4: Targets for demand management deployment

The final approach seeks to provide payments to the networks if they reduce demand below specified targets at either the network level or sub-network connection points. There are a number of factors that impact demand on the network, many of which the networks do not control. It would require elaborate classifications to separate internal and external factors of demand.

PIAC considers that simply targeting demand on the system is at odds with the AER's intention, which is to encourage non-network solutions. While PIAC supports moves to reduce peak demand, it is not clear that targets would address peak demand and constraints on the system, particularly in NSW where there is spare capacity across much of the system.

PIAC supports targets that are used as a supplementary force to encourage more efficient use of the system and greater demand management. However, targets alone should not be the solution.

Accountability and reporting

PIAC considers that whichever design the AER implements should have strict reporting and accountability frameworks. This will ensure that the benefits from demand management do flow through to consumers. In addition, it will enable greater sharing of knowledge and information about what is a successful demand management project, promoting greater uptake of demand management. Networks should be required to undertake five-year demand management planning processes in line with their regulatory resets. PIAC supports the planning and reporting requirements that are outlined in ISF's submission to this consultation paper.

PIAC recommends that the networks be required to report regularly on their demand management projects and work collaboratively with both third-party providers and other networks to ensure successful projects are widely adopted or scaled up. This is particularly important for any projects funded through the DMIA because, to date, most demand management projects have failed to move from the trial phase to regular network practice.