

## Demand Management

### *Submission to the AER's development of a Demand Management Incentive Scheme and Innovation Allowance*

Energy Consumers Australia thanks the Australian Energy Regulator (AER) for the opportunity to provide written comments to the AER on the development of the Demand Management Incentive Scheme (DMIS) and Demand Management Innovation Allowance (DMIA). These comments are made in response to an invitation from the AER following the DMIS/DMIA Options Day workshop, held in Melbourne on 6 April, 2017.

Effective Demand Management (DM) programs by networks are a critical measure to ensure that overall distribution network costs for consumers reduce over time. Distribution Network Service Providers (DNSPs) operate like any other business organisation and will respond to the incentives available to them.

#### **Introduction**

Enabling and empowering consumers to manage their consumption and costs, and at the same time contribute to the overall efficiency and stability of the system, is a priority for the National Electricity Market (NEM). Electricity prices have risen significantly in recent years, doubling in some cases; investment in new network capacity has contributed to this increase. Maximising the value extracted from existing infrastructure can avoid further capital investments and contribute to keeping prices lower for consumers.

Investment has been made recently to meet forecast increases in peak demand though total consumption declined. DM (that is, strategies by network businesses to manage peak demand by means other than new network investment) offers the opportunity to ensure that this extra investment is not required and to hence reduce costs.

The overall efficiency 'prize' on offer is potentially very significant. Modelling by Frontier Economics indicates that reducing peak demand could save consumers between \$4.4 billion and \$11.7 billion in the next ten years.<sup>1</sup>

In response to rule change requests from the COAG Energy Council and Total Environment Centre (TEC), the Australian Energy Market Commission (AEMC) in 2015 affirmed the potential of a DMIS to deliver benefits to consumers. The AEMC clarified the rules about the development and application of a DMIS and DMIA and noted that the operation of both could 'encourage more efficient expenditure decisions by distribution businesses, which may reduce costs to consumers over time'.<sup>2</sup>

The National Electricity Rules (NER) were changed to state that 'the AER must develop a demand management incentive scheme'.<sup>3</sup> The NER stipulates that the AER 'must develop

<sup>1</sup> AEMM, *Power of Choice – Stage 3 DSP Review*, 2012, vi. Available at: [www.aemc.gov.au/Markets-Reviews-Advice/Power-of-Choice-Stage-3-DSP-Review](http://www.aemc.gov.au/Markets-Reviews-Advice/Power-of-Choice-Stage-3-DSP-Review)

<sup>2</sup> AEMC, *New rules for demand management incentive scheme*, 20 August 2015, 1. Available at: <http://aemc.gov.au/Rule-Changes/Demand-Management-Embedded-Generation-Connection-I>

<sup>3</sup> NER, cl 6.6.3 (a)

and publish' the first version of the new DMIS and DMIA by 1 December 2016.<sup>4</sup> With this deadline having been missed, Energy Consumers Australia encourages the AER to continue to progress work on the DMIS and DMIA in a timely fashion.

Several years have passed since the AEMC initially identified the benefits of an effective DMIS and DMIA in 2012 and the NEM has experienced significant disruption and evolution. These do not represent a reason to delay or abandon the development of the DMIS. Rather, the transformation taking place across the NEM increases the need for effective DM incentives.

Energy Consumers Australia notes that the Options Day included consideration of whether either scheme should be introduced. Given the requirements in the NER, the question is not whether networks should be rewarded for implementing demand management schemes, but what form that reward should take.

#### **The potential cost of the DMIS**

There was general agreement amongst participants at the Options Day that appropriate financial incentives for networks to undertake efficient expenditure on DM will effectively promote an increase in such activity. Where those incentives are in place, network businesses expressed confidence that other perceived barriers, such as the availability of information to prospective DM providers, will be overcome or fall away.

While the AEMC's modelling suggests that the benefits of efficient investment in DM are far greater than the costs, Energy Consumers Australia accepts that there may be an initial outlay required by consumers to allow those benefits to be realised. It is possible, for example, that a network will seek to commence spending money on DM activities in one regulatory period, with the resulting reductions in price not occurring until subsequent regulatory periods.

It is logical, in Energy Consumers Australia's view, that the commitment to DM required to realise the benefits for consumers will have a similar time scale to the life cycle of the augmentations to the network that have been deferred or avoided. The NER appear to recognise this fact, containing a requirement for the AER to consider that 'incentives should not be limited by the length of a regulatory control period'.<sup>5</sup>

#### **DM and economic efficiency**

Operationalising the national energy objectives – to promote the efficient investment in, and operation and use of, energy services for the long-term interest of consumers with respect to price, quality, safety, reliability and security of supply – requires an understanding of the economic concept of efficiency.

In Australian policy discussion, this is usually invoked via the 'Hilmer trilogy' that there are three components of economic efficiency; technical or productive efficiency, allocative efficiency and dynamic efficiency. The first two are types of static efficiency.

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<sup>4</sup> NER, cl 11.82.2 (a)

<sup>5</sup> NER, cl 6.6.3 (c)(6)

As Havyatt outlines,<sup>6</sup> the distinction between static and dynamic efficiency is the difference between efficiency under existing technology and efficiency under new technology. Dynamic efficiency is the consequence of innovation; doing things differently.

Because the consequence of investment in innovation (research and development) is uncertain it can be hard for regulatory processes to properly support dynamic efficiency. But in an environment of transition in the make-up of generation technologies and locations, innovation in the rest of the electricity supply chain is essential to ensure current and future consumers pay no more than they need to for a reliable energy supply.

The current regulatory construct provides rewards to DNSPs through the return for capital and through incentive schemes. If the regulated rate of return for capital is higher than the DNSPs actual cost of capital, they are rewarded by any activity that builds the Regulated Asset Base. They are also rewarded for any improvement in operating efficiency through their ability to charge prices reflective of the higher original costs.

This has been an effective regime, especially when initial concern in a post-liberalisation world was whether DNSPs would invest sufficiently. These mechanisms have been effective in reducing network prices. The AER State of the Energy Market Report 2017 (Figure 3.7) demonstrates how this regime has so far reduced prices.

However, further price reduction will become increasingly dependent on more dramatic innovation by networks. Energy Consumers Australia considers that the regulation of networks needs to evolve to one where the return for capital reflects the security provided by the Revenue and Pricing Principles and efficiency is clearly measured and rewarded through empirical estimation techniques (such as benchmarking). In this environment, networks will increasingly be rewarded directly for innovation, particularly innovation that has been explained to and supported by consumers.

#### **The importance of transparency regarding the effectiveness of DM**

As previously stated, Energy Consumers Australia is comfortable with the idea that realising the benefits of DM may require initial investments from and incentive payments to networks that flow through to consumers' bills, with the resulting net price reductions being realised later. There are two issues at stake. The first is the potential difference in timing of the cost to consumers of an investment in long lived infrastructure versus an initial investment through operating expenses. The second is the need to provide the network with an incentive payment to make the change.

Our support of the changed financial arrangement is provided on the condition that networks are providing clear and accessible information about the DM activities they are undertaking the impacts of those activities on the need for other network investments and are engaging the support of their consumers for the proposed activities.

Energy Consumers Australia, therefore, suggests that DM activities represent a topic about which network businesses should continuously engage with their consumers and consumer advocates. Energy Consumers Australia's research demonstrates a low level of consumer

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<sup>6</sup> David Havyatt, 'The Components of Efficiency' *Network* Issue 62 March 2017. ACCC. [www.accc.gov.au/publications/network/network-issue-62](http://www.accc.gov.au/publications/network/network-issue-62)

satisfaction with the outcomes being delivered by the energy market, relative to other services. Consumers are also not confident that the market is working in their interest.

This has led us to support the prudent and efficient adoption of new models for supplying electricity. Networks must evaluate alternatives in a robust manner that places consumer needs and preferences at the centre of the equation.

### **Conclusion**

Energy Consumers Australia supports the increasing use of efficient demand management options by electricity distribution networks. We encourage the AER to develop and implement an effective DMIS and DMIA as soon as practicable, as is required under the NER.

The DMIS could result in consumers funding increased network spending in one regulatory period to realise greater benefits of demand management in subsequent periods. Consumers accept the concept of funding developments on the condition that benefits are shared and outweigh costs over time. Such an eventuality would be acceptable to Energy Consumers Australia, provided engagement between networks, consumers and the AER allows the effectiveness of any DM investment to be properly assessed.