



Fact sheet: Distribution businesses and demand management

The role of distribution businesses in demand management

Investment by distribution businesses is generally driven by the need to build sufficient network capacity to meet reliability standards. In certain circumstances, demand management initiatives (including embedded generation) can reduce, defer or remove the need for network investment by dampening peak demand.

Distribution businesses can manage peak demand by providing customers with accurate price signals, enabling them to respond and manage their demand to avoid paying high prices at peak times. Distribution businesses can also manage peak demand by providing customers with direct payments and incentives to alter their electricity use, or have their electricity use controlled, at peak times.

If the need to meet peak demand and any reliability standards were addressed solely by customers responding to accurate price signals, the need for distribution businesses to manage that demand by building additional network capacity (or paying customers directly to alter their electricity use), would be lessened.

However, for several reasons, the market is unlikely to ever reach the point where price signals mean that there are no network constraints at peak times. This means that distribution businesses will always have a role in managing demand on their networks and, in doing so, they will always need to make decisions about how best to manage that demand – that is, whether network or non-network solutions provide the most efficient means of meeting reliability standards.

It follows that the rules and the supporting arrangements should encourage distribution businesses to make efficient expenditure and investment decisions. This will lead to lower overall system costs which should be reflected in lower retail prices for consumers.

Regulatory arrangements supporting efficient demand management

The regulatory framework for distribution businesses uses obligations and incentives to encourage the businesses to make decisions which contribute to achieving a more efficient demand and supply balance in the electricity market.

In relation to demand management, the regulatory framework aims to achieve an outcome where: distribution businesses are encouraged to pursue and develop demand management initiatives when these are at least as efficient as network investment; and customer participation in demand management is supported by the provision of network tariff and planning information by distribution businesses.

There are two key areas of the regulatory framework which relate to demand management:

- **Incentive regulation framework:** These arrangements aim to encourage distribution businesses to spend efficiently and to share the benefits of efficiency gains with consumers. More specifically, they are tools the AER can use to design a regulatory framework which encourages distribution businesses to make efficient decisions on when and what type of expenditure to incur in order to meet their network reliability and safety requirements.

The key incentive schemes include the efficiency benefit sharing scheme (EBSS), and the capital expenditure sharing scheme (CESS) and associated review mechanism to assess the efficiency of capital expenditure overspends relative to that set by the AER.

- **Planning and investment framework:** These arrangements place obligations on, and create a framework within which distribution businesses are required to consider non-network options as alternatives to network investment in certain circumstances.

The key components include the distribution annual planning report (DAPR), demand side engagement strategy (DSES) and the regulatory investment test for distribution (RIT-D) and associated RIT-D process.

The purpose of the RIT-D is to ensure that distribution businesses consider all credible options (which may include both network and non-network options) when choosing how to address a constraint on the distribution network.

Collectively, these obligations and incentive schemes allow the AER to optimise the regulatory framework to promote efficient decision making by distribution businesses in relation to expenditure on their networks.

Key areas of reform

At the time of the 2012 Power of Choice review, a number of reforms were underway to improve the obligations and incentives on distribution businesses to promote efficient demand management initiatives. These included the following:

- The *Distribution network planning and expansion framework* rule change request considered issues associated with how distribution businesses include demand management alternatives in their planning and project assessment process. It encompassed arrangements for the RIT-D, DSES and DAPR.
- The *Economic regulation of network service providers* rule change request changed the NER arrangements to provide greater incentives for distribution businesses to pursue efficient capital and operating expenditure, and amended how the allowed rate of return was determined.
- The *Connecting embedded generators* rule change request resulted in a clearer, more transparent connection process with defined timeframes and information requirements to reduce barriers to the connection of embedded generators to distribution networks.

Power of choice reform package

The 2012 AEMC Power of Choice Review set out a market-wide reform program to give electricity consumers more opportunities to understand and take control of their electricity use and associated costs.

In relation to distribution networks, the reform program included a number of key rule changes, which have now been completed or are underway, aimed at improving the incentives on distribution businesses to use demand management to reduce overall capital and operating costs:

- *Cost-reflective distribution network pricing*: introduced in the AEMC's final determination in November 2014, these reforms require distribution businesses to set prices that reflect the efficient cost of providing network services to individual consumers. This will allow consumers to make more informed decisions about their energy use as new technologies emerge and result in better outcomes for both individual consumers and the overall electricity system. Importantly, the new arrangements also support the businesses to develop network tariff structures which appropriately incentivise efficient demand side responses by customers.
- *Expanding competition in metering and related services*: these reforms set out in the AEMC's draft determination in March 2015 would introduce a competitive framework for rolling out advanced meters. It would allow any registered entity to roll out advanced meters where they see a business case to do so or because customers demand products and services that require an advanced meter. These meters will also facilitate the inclusion of cost-reflective network pricing as well as providing further opportunities for demand side response, such as load control.
- *Demand management incentive scheme*: these reforms provide a framework to guide the AER in developing and applying a demand management incentive scheme and innovation allowance mechanism which will help to balance the incentives on distribution businesses to make efficient expenditure decisions. This has the potential to lower overall system costs and lead to lower retail prices for consumers.

Other Power of choice reforms

The AEMC has introduced a number of other reforms, and made a number of other recommendations for change, as part of the ongoing reform package resulting from the 2012 Power of Choice review. These reforms and recommendations aim to give consumers greater control over how and when they consume electricity and include:

- Changes to improve customers' access to information to support demand side participation.
- Recommendations for changes to the arrangements for electricity customer switching.
- Recommendations in relation to arrangements for open access and common communication standards for smart meters.

While these reforms and recommendations may ultimately lessen the need for distribution businesses to undertake or procure demand management themselves, there is still a role for distribution businesses to play in managing demand on their networks and evaluating alternatives to network investment.

HOW THE NEW RULE FITS WITHIN THE CURRENT DEMAND MANAGEMENT FRAMEWORK

Network businesses plan and operate the network to provide a safe and reliable electricity supply to customers. One part of this involves managing demand across the network.



REGULATORY DETERMINATION PROCESS



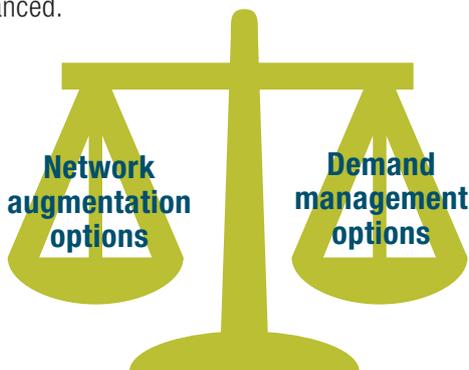
Current incentives

The overarching economic regulatory framework provides incentives to businesses to provide network services at the lowest possible cost.

Specific mechanisms, including the Efficiency Benefit Sharing Scheme and Capital Expenditure Sharing Scheme, help balance the incentives between building new infrastructure and seeking alternative solutions including demand management.

Balancing the incentives

As part of the regulatory determination process, the AER considers whether the incentives are balanced.



NEW RULE

The **Demand Management Incentive Scheme (DMIS)** is applied if incentives are unbalanced so that network businesses can choose the most efficient way of meeting peak demand.



NETWORK BUSINESS DEMAND MANAGEMENT PLANNING



Annual Planning review

Network businesses do a review each year to identify and resolve potential problems on the network.



Annual Planning Report

The outcomes of the review are published in a report. The report sets out demand and capacity forecasts, and identifies emerging constraints on the network. It also includes information about the business's demand management activities.



Assessing options for investment

Where gaps between demand and capacity exist, the business identifies and assesses options. Demand management must be considered as an alternative to building more infrastructure:

Cost benefit analysis for projects less than \$5M

Regulatory Investment Test (RIT-D) for projects more than \$5M

Options assessment is supported by research and development.

NEW RULE

The **Demand Management Innovation Allowance (DMIA)** provides funding for network businesses to research and develop innovative demand management solutions.

Incentives guide selection of options