



# EAQ

## Review of Demand-Side Participation in the National Electricity Market Stage 2 Final Report

### Overview

#### What is the Review of Demand-Side Participation (DSP) in the National Electricity Market (NEM)?

The review is being undertaken to provide advice to the Ministerial Council on Energy (MCE) on changes that may be needed to the NEM to enable the demand-side (i.e. users of electricity, and their representatives) to participate more actively in the market.

#### Who called for this Review?

In October 2007 the AEMC initiated this review in response to concerns that current market arrangements were too heavily focused on expanding generation and network capacity in order to meet demand for electricity. This was the first review to be initiated by the AEMC.

#### Why is this review important?

At present there is a strong supply-side focus in the NEM and the demand-side is relatively under-represented. Reductions in consumption at certain times can create savings in supply side costs - in particular, the need for investment in peak generation and network capacity. Where these investments are efficiently avoided the overall costs of supplying electricity can be reduced.

#### What is the stage two final report?

Stage two of the DSP review tested whether current rules and national electricity market frameworks create impediments to DSP. It identified ways to reduce or remove any impediments.

#### What does the stage two final report say?

The report concludes that, in the context of the current technology, pricing and demand conditions, the framework does not impede the use of DSP. However, there are a number of aspects of the Rules that can be improved to enhance the participation of the demand-side.

#### What changes are recommended for electricity markets?

Stage two of this review has identified the need for change to existing frameworks in the following areas:

- removal of a bias that may discourage the use of operating expenditure for DSP on transmission networks.
- Incentives should be strengthened for network businesses to develop innovative applications for DSP and more cost effective connections for embedded generators.
- Payments to embedded generators for avoided TUOS should only be made when an embedded generator does not receive network support payments from a transmission business.

#### What DSP-related recommendations have been made by other AEMC reviews recently?

The DSP review has contributed to development of recommendations made by other AEMC reviews in relation to DSP:

- The Review of a National Framework for Electricity Distribution Network Planning and Expansion

found that a review is needed to consider whether the form of planning standard for distribution networks should be derived on an economic basis, and if so, how.

- The Review of Energy Market Frameworks in light of Climate Change Policies (Climate Change and Energy Frameworks Review) found that the Australian Energy Market Operator (AEMO) should consider ways to improve the provision of information regarding volumes of DSP already in the market.
- The Climate Change and Energy Frameworks Review also found that AEMO should consider the role of small scale embedded generators in providing additional services directly to the market.

#### What happens next?

New smart meter and smart network technology can facilitate a significant increase in participation from the demand-side in energy markets. This means there is an ongoing role for reviewing the regulatory framework from the perspective of DSP.

On the basis of our preliminary analysis we have concluded there is a need to identify and analyse the relevant framework issues in a further stage of the DSP Review, the previously foreshadowed stage three.

We will work closely with the Ministerial Committee on Energy, its Standing Committee of Officials, and relevant stakeholders to further develop the scope of this work program and appropriate terms of reference.

**We have found that the framework does not materially bias against the use of demand-side participation in the National Electricity Market.**

**A number of enhancements can be made to the Rules to improve the participation of the demand-side**

## Demand-side participation

### What is demand-side participation?

The demand-side is made up of all the households and businesses who routinely consume electricity. The decisions on when, and how much electricity to consume represents their participation in the electricity market.

## Energy market frameworks

### What are the energy market frameworks?

These frameworks include the Law and Rules governing the national electricity and natural gas markets. They may also include other laws and state-based regulatory instruments that have a material impact on behaviour in energy markets.

## National Electricity Objective

### What is the National Electricity Objective?

AEMC decision making is guided by the objective set by the National Electricity Law.

The national electricity objective is:

“to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to—

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.”

## Review Process

### Getting started

The Review of Demand-Side Participation in the National Electricity Market commenced in October 2007. It was initiated by the AEMC in response to stakeholder concerns that the current market arrangements placed unnecessary weight on expanding generation and network capacity in order to meet demand for electricity.

## Terms of Reference

The statement of approach and terms of reference (March 2008) outlined the review's objective in seeking to address three questions in relation to DSP:

1. Can measures that facilitate DSP improve the efficiency of investment in, and operation and use of, electricity services in the NEM?
2. Are there obstacles or disincentives to efficient DSP in the NEM?
3. Where obstacles or disincentives are identified, how can the Rules be changed to reduce or remove them in order to facilitate efficient DSP in the NEM?

### What was the timetable for stage two of the review?

The stage two final report followed an Issues Paper (16 May 2008) and a Draft Report (29 April 2009).

## Reference Group

The AEMC established a DSP Reference Group of experts to from industry, consumer, environment and policy organisations to help the Commission in its consideration of DSP issues.

### Which organisations were represented on the DSP Reference Group?

- EnergyAustralia
- AGL
- Total Environment Centre Inc.
- Consumer Utilities Advocacy Centre
- BlueScope Steel Ltd
- Energy Response Pty Ltd
- CS Energy Ltd
- ElectraNet Pty Ltd
- UNSW Centre for Energy and Environmental Markets
- Australian Energy Market Operator
- Australian Energy Regulator
- Ministerial Council on Energy Standing Committee of Officials.

## Future work program

It is important for the AEMC to continue to monitor developments that can impact on the performance of the market. In particular, there are likely to be a number of issues associated with the roll-out of smart grids and smart meters across the NEM.

Smart grids include technology that significantly increases the number of customers whose consumption can be monitored and controlled in real time.

We have undertaken some preliminary analysis to identify challenges for the Rules that may arise through more interactive communication between the demand-side and supply-side.

Possible challenges that may form the scope for stage three include:

- Enabling an effective interaction between competitive and regulated services;
- The regulation of access to infrastructure, data and customers;
- Encouraging efficient investment in new technology and services;
- Enabling more sophisticated price signals to be passed through to customers; and
- Ensuring that the rights and interests of customers are protected.

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