

Attachment A - Review of Demand-Side Participation (DSP) in the NEM – Terms of Reference

Definition of DSP

For the purpose of this Review the Commission has defined DSP as follows:

‘Demand-Side Participation is the ability of consumers to make decisions regarding the quantity and timing of their energy consumption which reflects their value of the supply and delivery of electricity.’

Objective of the Review

The Review is 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?

Scope of the Review

In seeking to answer the question above, the Commission will undertake a staged approach to the review. The three stages are as follows:

- Stage 1 – will consider DSP in the context of the Commission’s current work program in order to develop recommendations that can be considered in the context of the relevant Rule change proposals and Reviews;
- Stage 2 – will review the Rules more broadly in order to identify where there may be barriers to the efficient integration of the demand-side in the NEM and develop proposals for Rule changes to reduce or remove them where efficiency would be improved; and
- Stage 3 – in recognition of ongoing reforms in the sector, this stage will seek to identify any additional, or remaining, barriers to efficient DSP in the NEM and develop proposals for Rule changes to reduce or remove them where efficiency would be improved.

Review Stage 1

Stage 1 of the Review will consider DSP in the context of the existing Commission work program, specifically the:

- National Transmission Planner Review;
- Congestion Management Review; and
- Comprehensive Reliability Review.

The Commission has engaged NERA Economic Consulting to undertake an assessment of DSP in the context of these Reviews having regard to the defined scope of each project.

Upon receiving NERA's report, and having considered public submissions on their recommendations, the Commission will consider the recommendations in the context of each Review. The Commission's role in this regard will be to consider, within the scope and objective of each project and guided by the NEO, whether the recommendations by NERA are likely to deliver more efficient outcomes. Recognising that there will be a number of other important considerations and inputs relevant to the decisions on each of these projects, the Commission's response to the recommendations will be focused on ensuring an outcome that contributes best to the NEO.

As the final NERA report will be provided in May, the Commission's considerations of its findings for the Congestion Management Review will be limited to NERA's draft recommendations. In addition, noting that a Final Report for the National Transmission Planner (NTP) Review is due 30 June 2008, should NERA's final recommendations alter significantly from those in its draft report, the ability of the Commission to consider any material changes as part of the NTP Review may be limited.

Review Stage 2

Stage 2 of the Review will undertake a broader assessment of the Rules than Stage 1. Stage 2 will be focused on the following aspects of the NEM arrangements in seeking to identify obstacles in the Rules to efficient DSP and options for addressing them where there are benefits in doing so:

- economic regulation of networks;
- network planning;
- wholesale and financial markets; and
- the utilisation of DSP for reliability purposes.

The key lines of enquiry for each of these aspects will include the following:

Economic Regulation of transmission and distribution networks

If the incentives on network owners and users in the regulatory framework are not properly set there may be incentives for network owners to choose investment options that maximise their returns but are not necessarily efficient for the market, or for network users to utilise the network in an inefficient manner. The Commission will investigate:

- whether the incentives in the framework for the economic regulation of networks allow for the efficient use of non-network options such as DSP; and
- if the pricing framework ensures that network users receive efficient signals about the impact of their consumption on the need for network investment.

Network Planning

The Commission will consider most of the issues related to transmission planning as part of Stage 1 of the review and the NTP Review. However, the objectives and focus of the NTP Review are specific to the Terms of Reference given to the Commission by the MCE. As a result, there may be additional issues, such as those which relate to distribution networks, or specific aspects of the planning obligations of transmission network owners, that may be relevant for further consideration. The Commission will investigate:

- whether the current basis for network infrastructure planning, particularly for distribution networks, allows for an appropriate consideration, and efficient inclusion of, demand-side resources;
- whether the Rules provide a barrier to the introduction of innovative solutions for non-network options such as direct load control; and
- whether the arrangements for access and connection to the network represents a barrier to efficient DSP.

Wholesale and financial markets

While the Rules currently allow customers to be actively involved in the NEM central dispatch and pricing process by registering as scheduled loads, this mechanism is rarely used in practice, which may be due to its complexity for demand-side providers as well as the obligations it places upon them. The Commission will investigate:

- whether there are barriers or disincentives to the efficient integration of the demand-side in the NEM central dispatch and pricing process, and the potential benefits and feasibility of options that may improve its integration;
- whether there are obstacles or disincentives to efficient financial contracting with demand-side participants.

DSP for Reliability Purposes

The Reliability Panel as part of its Comprehensive Review of Reliability considered the Role of the demand-side in the context of maintaining reliability. Specifically the Panel gave consideration to the concept of a standing demand-side reserve. In addition, the Panel has also forwarded all material submitted to it that relates to demand-side matters for consideration as part of this Review. On that basis, the Commission will consider:

- whether the concept of a standing reserve will deliver efficient outcomes for maintaining reliability in the NEM; and
- if there are any other barriers DSP assisting in maintaining the reliability of the electricity system.

Review Stage 3

The Commission recognises that the MCE is currently undertaking a number of reform initiatives in the electricity industry. These include:

- the regulation of non-economic distribution;
- national framework for retail regulation; and
- the cost and benefit analysis for smart metering.

A number of these elements may have important implications for the application of DSP. Therefore, subsequent to this reform program being completed, the Commission will identify if there remains any barriers to the efficient participation of the demand side in the areas identified above. A decision on the scope and timing of Stage 3 will be made upon the completion of Stage 2 of the Review.

Timing and Outputs

The Commission intends to deliver the following outputs for each stage of the Review:

- Stage 1 – a response to the NERA recommendations as part of the relevant review and Rule change proposals;
- Stages 2 and 3 – a report to the MCE outlining any recommended changes to the Rules that the Commission deems are appropriate and the detailed proposed Rules.

The timetable for the Review is as follows:

Table 1.1: Stage 1 Review milestones and timing

Milestone	Timing
Review Stage 1	
Draft NERA Recommendations Report	3 March 2008
Close of submissions to NERA Report	28 March 2008
Final NERA Recommendations Report	16 May 2008
Review Stage 2	
Scoping Paper	April/May 2008
Draft Report	September 2008
Final Report	December 2008
Recommended Rule Packages	First Half 2009
Review Stage 3	To be determined