grid australia
BACKBONE OF THE NEM

5 June 2009

Mr John Tamblyn
Chairman
Australian Energy Market Commission
Level 5, 201 Elizabeth Street
Sydney NSW 2000

By email: submissions@aemc.gov.au

Dear John,

Draft Report- Review into demand side participation in the NEM (EPR0002)

Grid Australia welcomes the opportunity to contribute to the AEMC's review of the regulatory framework in relation to demand side participation (DSP) in the National Electricity Market (NEM) and to make this submission in response to the AEMC's Draft Report.

Grid Australia considers that the current regulatory framework supports the exploration of efficient DSP and welcomes the AEMC's finding that the current forms of regulation do not pose a material barrier to DSP. Grid Australia considers that effective incentives coupled with a supportive regulatory framework can deliver greater DSP outcomes.

Throughout this review Grid Australia has expressed its support for efficient DSP and its important role in the NEM. Grid Australia reiterates that the current Annual Planning Report (APR) and Regulatory Test consultation processes provide an effective vehicle to support and bring forward non-network solutions. For the distribution sector, the reform of these elements of the regulatory framework is being considered as part of the AEMC's development of a National Framework for Distribution Planning and Expansion.

I trust that this submission will assist you in developing your Final Report. If you would like to discuss any aspect of this submission, please do not hesitate to contact me on 08 8404 7983.

Yours sincerely,

Rainer Korte

Rainer Korte
Chairman
Grid Australia Regulatory Managers Group

grid australia
BACKBONE OF THE NEM

Review of Demand-Side Participation in the National Electricity Market

Response to AEMC Draft Report

5 June 2009

Powerlink Queensland · TransGrid · ElectraNet electricity transmission · TRANSEND · SP AusNet A member of Singapore Power Group

Table of Contents

1. Overview

1.1 Background

The AEMC commenced its review of DSP in the NEM in October 2007. The objective of the AEMC's review is to identify whether there are barriers or disincentives within the Rules which inhibit efficient DSP in the NEM.

Grid Australia has participated in consultation throughout this review and expressed its support for efficient DSP. In earlier stages of this review, Grid Australia has noted that:

- the Rules already require transmission network service providers (TNSPs) to actively consider non-network options for resolving network limitations (including DSP) and to publish information so as to encourage proponents of such solutions to come forward;
- large scale DSP at the electricity transmission level (which has the potential to defer transmission investment) will continue to be actively considered and taken into account by TNSPs as part of the normal transmission planning and consultation processes set out in the Rules; and
- the greatest potential for DSP is in electricity distribution and retail.

The AEMC published a Draft Report on 29 April 2009 and is seeking comments on its draft findings and recommendations.

1.2 Structure of this paper

This submission responds to the AEMC's major findings in its Draft Report and sets out Grid Australia's views in a structure consistent with that paper:

- Section 2 addresses the incentive properties of network regulation and its potential impact on DSP;
- Section 3 comments on network planning, connection and access issues; and
- Section 4 discusses service standards and service standard incentive schemes.

The wholesale markets and financial contracting matters raised in the Draft Report are not network issues, and therefore Grid Australia has not provided any comments on these findings.

1.3 Inter-relation with other reviews

Grid Australia notes that a number of aspects of this DSP Review relate to other current and completed review and Rule change processes.

Many ideas raised in the AEMC's Draft Report interact with the AEMC's current work to develop a National Framework for Distribution Planning and Expansion, as well as the Ministerial Council on Energy's (MCE's) review of the Distribution Connection Framework. Grid Australia suggests that where certain DSP planning and connection issues require resolution, they may be pursued further as part of these processes.

Further, some of the recommendations in this Draft Report overlap with outcomes in the recently finalised TEC Rule change proposal.[1] The Rules resulting from this process, aimed at enhancing opportunities and incentives for demand management in the NEM, are due to take effect on 1 July 2009.

2. Economic Regulation of Networks

2.1 Network Prices

Grid Australia welcomes the AEMC's finding that the obstacles to efficient pricing in the NEM are not attributable to the current framework which obliges service providers to set cost-reflective prices. Given the practical limitations to improving locational signals to end-consumers for the purposes of DSP, the Draft Report recognises that "it will be inadequate to rely purely on signals provided through network charges to deliver efficient levels of DSP." Grid Australia supports this finding and believes that the consideration of improvements in transmission pricing signals is futile if end use customers do not see appropriate price signals aimed at changing their consumption behaviour.

It is also noted that network prices that may be avoided or deferred through DSP are separate and distinct from energy prices at any given time. It is possible to have low pool prices for example, with high local load and a congested network, and vice versa. The balance of energy and network pricing signals seen by end users will ultimately determine the level of incentive for load response.

2.2 Form of regulation

Grid Australia considers that fundamental change to the form of regulation is neither necessary nor desirable to encourage greater DSP. As such, Grid Australia supports the AEMC's finding that revenue caps are not a material barrier to DSP solutions. Providing that network regulation continues to encourage network businesses to deliver cost efficiencies, network businesses will assess network and non-network solutions on an equitable basis.

In relation to the AEMC's finding that the incentives for efficient DSP may be weaker under a revenue cap, Grid Australia considers that this is outweighed by the need to apply revenue caps in transmission to accommodate the significant and lumpy nature of investments and to manage volume risk. Regardless of the form of regulation, TNSPs are required to publish information seeking non-network alternatives and to

[1] AEMC, *Final Rule Determination- TEC Demand Management Rule Change Proposal*, 23 April 2009

consider and analyse DSP options in their cost and options analysis for determining the most efficient means to address an identified network need.

Further, Grid Australia notes that upon commencement of the TEC demand management Rules, the National Electricity Rules (NER) will require:

- TNSPs to provide specific information in their Annual Planning Reports (APRs) about forecast constraints where demand reduction might defer capital expenditure by at least 12 months;
- the AER to accept network support payment (opex) proposals which relate to DSP contracts commenced in the previous regulatory period; and
- the AER to assess the extent to which TNSPs have demonstrated their consideration and assessment of non-network options in their revenue proposals. This is linked to a specific obligation for TNSPs to provide information in their revenue proposals on their consideration of non-network options.

This will further ensure that large scale DSP at the electricity transmission level will continue to be actively considered and taken into account by TNSPs in meeting their obligations under the Rules.

2.3 Balance of incentives between capex and opex

The AEMC has found that there is an imbalance in the regulatory framework in relation to the risk of recovering revenue between capex and opex that creates a bias against DSP expenditure. This is because an efficiency carry over mechanism (ECM), if only applied to opex, appears to penalise the efficient substitution of capex with opex.

Grid Australia considers that there may be merit in the regulatory framework providing an exemption for DSP opex from the ECM to encourage DSP and avoid penalising businesses for implementing a DSP option. Grid Australia notes this option has already been adopted by the AER in its demand management incentive schemes for DNSPs in South Australia, Queensland and Victoria.

Grid Australia notes that the AEMC raises the possibility of a capex ECM but notes that this may not be appropriate in transmission where it may provide opportunity for significant windfall gains. Grid Australia considers that given the rigorous discipline on capex forecasting provided by the AER's ex-ante capex approval process, this concern is over-stated.

Grid Australia considers that while TNSPs face stronger incentives under Chapter 6A to minimise capital expenditure, the AEMC could consider providing additional incentives on capex.

2.4 Innovation incentives

Grid Australia supports the AEMC's finding that greater incentives could be provided to NSPs to undertake R&D to better exploit the opportunities available to deliver appropriate energy solutions to customers. This could be through funding

arrangements for innovation or an arrangement to allow businesses to retain the benefits of their innovations for longer periods. The AEMC has recommended a seed funding type arrangement which would provide a set allowance for pilot programs and initiatives on a "use it or lose it" basis. This would be coupled with a compliance and reporting requirement to ensure appropriate use.

Grid Australia considers the regulatory framework should continue to allow and encourage NSPs to explore opportunities to provide efficient and reliable non-network solutions.

3. Network planning, connection and access

3.1 Network planning

The AEMC's Draft Report does not recommend any changes to the existing planning and consultation provisions in the Rules in relation to transmission. Grid Australia strongly supports this conclusion, as TNSPs already provide substantial information to stakeholders regarding network constraints and planned network projects. Grid Australia believes the information provided in accordance with the existing provisions compares very favourably with information that would be available in more competitive markets. As noted above, these provisions are also being strengthened from 1 July with the implementation of the TEC Rule change.

Grid Australia notes that the majority of planning issues in the Draft Report relate to distribution planning and, as such, decided not to comment on these aspects in any detail. However, Grid Australia notes that as part of its work to develop a National Framework for Electricity Distribution Planning, the AEMC has canvassed a number of reforms in a *Workshop Paper (Indicative Specifications).*[2] These would significantly increase the range of obligations DNSPs would have in relation to DSP in the NEM, such as:

- requiring DNSPs to periodically publish a non-network strategy setting out its preferred processes and approaches to dealing with DSP options;
- establishing extensive detailed annual planning reporting requirements to increase and enhance information to the market on network planning and investment; and
- requiring a lengthened and more dynamic regulatory test consultation process for distribution to encourage earlier DSP-proponent involvement.

These are substantial changes which could potentially be seen to enhance and improve the current planning and reporting arrangements. However, Grid Australia considers the AEMC needs to balance the potential benefits of these reforms against the likely significant regulatory burden that will result as users will ultimately bear any higher regulatory costs through network charges.

---

2 AEMC, Workshop paper, Appendices, http://www.aemc.gov.au/Media/docs/003Workshop%20Paper-4b52de7a-1d03-4e34-8c11-a3e4ccb9cb29-0.pdf

The AEMC found in its Draft Report that in distribution planning there is a lack of transparency in the current arrangements that limit the potential inclusion of DSP.

Grid Australia does not consider this to be the case. Specifically, the Rules require TNSPs to undertake varying degrees of formal consultation with market participants and interested stakeholders depending on the total capitalised dollar value of the likely augmentation investment via the Regulatory Test process and/or publication in a TNSP's Annual Planning Report. The primary reason for the consultation requirements is to provide sufficient notice and information to the market to enable prospective non-network option proponents to consider, develop and put forward legitimate non-network alternatives to address an identified emerging network limitation.

Further, Rule changes in relation to the RIT-T will soon establish a new project specification phase which will provide additional time (total of nearly 3 months) to be made available for the proposal of alternative options as part of the mandated consultation process.

The Draft Report also states that consultation based on network options, rather than on a need for a general solution creates a barrier to DSP. Grid Australia does not consider that network solutions can be characterised as being the default option, although they do provide a reference point for assessing non-network options. Provided that network businesses have an incentive to minimise costs (as is currently the case), the lowest total cost option (including reliability issues) will be adopted.

3.2 Network connection and access

Grid Australia supports the AEMC's finding that material barriers to DSP do not exist in the current arrangements regarding connection network and access.

While the matters raised in the Draft Report principally concern distribution, Grid Australia notes that minimum connection standards should be applied to ensure quality of supply. Any changes to required standards should be managed carefully to ensure there is no reduction in the quality of network service to the customer base and recognise that larger embedded generators may have an impact on power system security.

4. Service standards and incentive schemes

4.1 Service standards

The AEMC's Draft Report finds that deterministic reliability standards are likely to discourage DSP as they do not allow for the appropriate consideration of the relative cost of an option and its reliability impact.

The challenge in pursuing a DSP solution compared with a transmission alterative is it has to be able to be available with a high level of certainty to maintain reliability. This could mean for example pre-contingent load shedding to prevent a post-contingent overload/ stability limitation. As DSP solutions mature over time, these challenges are being overcome under the existing standards framework.

Grid Australia notes that the AEMC's Reliability Panel has provided a Final Report to the MCE as part of its Transmission Reliability Standards Review which recommended that transmission reliability standards be derived from an economic customer value of reliability, but be expressed for application in a deterministic form.

Grid Australia previously stated as part of that Reliability Panel process that it considers that a deterministic form of reliability standards based on economic considerations best meets the review objectives and assessment criteria. Grid Australia remains of this view and will participate in any further work to develop appropriate transmission reliability standards following the MCE's consideration of the Reliability Panel's recommendations.

4.2 Service incentive schemes

The AEMC has found that existing service standard incentive schemes do not pose a barrier to efficient DSP as they allow NSPs to appropriately compare the costs and benefits of reliability in relation to different options.

Grid Australia supports this finding, and considers that it is important to have reliability factored into any option cost-benefit analysis, and for any consequence of failure against the standards to be efficiently shared to maintain the incentives under these schemes.