grid australia
BACKBONE OF THE NEM

13 March 2009

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

By email: submissions@aemc.gov.au

Dear John,

TEC Demand Management Rule Change Proposal – Draft Rule Determination

1. Introduction and Overview

Grid Australia welcomes the opportunity to respond to the Commission's draft determination on the Rule change proposal put forward by the Total Environment Centre (TEC) to encourage increased Demand Management (DM) in the National Electricity Market (NEM). Grid Australia also appreciates that the AEMC is conducting a review into DM and the interaction of that review with this Rule change.

The Commission proposes to approve the following elements of the Rule change, as modified from the original proposal:

- requiring TNSP's to publish robust data on upcoming network constraints relevant to DM service providers in their Annual Planning Reports;
- requiring the AER to accept forecasts of network support payments based on the previous regulatory period that continue into the next; and
- integrating DM activities into revenue determinations by requiring TNSPs to set out non-network alternatives in their revenue proposals, and requiring the AER to consider the extent which TNSPs have made provision for non-network alternatives.

Grid Australia outlines its position on these proposals in turn below. For the reasons it has previously outlined, Grid Australia supports the Commission's decision not to accept the remaining changes put forward in the original proposal and refers the Commission to its first round submission in this regard.

As a general comment, opportunities for DM as a substitute for network options will always be greater at the distribution level than for transmission. As such, the focus on transmission in the TEC proposal is limited in its usefulness.

Grid Australia is supportive of measures to encourage efficient DM, consistent with the National Electricity Objective, and is sympathetic to proposals aimed at providing additional DM incentives and greater clarity for the recovery of DM investments, as explored in the following sections.

2. Additional information required in Annual Planning Reports

The AEMC has proposed in its draft Rule determination that TNSPs provide additional information in their Annual Planning Report (APR). The proposed change relates to providing information that is designed to assist demand side participants assess whether to enter the market and offer their services to meet forecast network limitations.

The proposed additional information includes:

- a new definition '*overload*' which would be defined as the "extent to which *peak load* is greater than firm capacity";
- the number of days and hours in a financial year in which '*overload*' is likely to occur; and
- the expected date on which a Request for Information would be issued.

Grid Australia is concerned about the proposed new term '*overload*'. Consistent with their Rules obligations, TNSP's are required to plan, design and operate the network so that all equipment is operated within equipment ratings, or in other words, below 'overload' levels. Grid Australia considers the term overload in this context as inappropriate, and therefore, suggests that the same outcome can be achieved with less confusion amongst participants by the use of a different term. The term *constraint,* as currently defined in the Rules, is appropriate to refer generally to what the AEMC defines as "overload" situations. In this context the "extent of the constraint" provides the additional information being sought by the AEMC.

In relation to the availability of the additional information, Grid Australia considers that while a greater level of detail of forecast maximum constraints may be readily available for simple constraints such as thermal limits on radial lines, it is far more complex for network limits determined by power system stability considerations, or those limits across cut-sets involving multiple transmission paths. Moreover, quantification of the frequency and duration of constraints is problematic due to the unpredictability of future seasonal weather patterns.

In these more complex situations the network limit is determined by a number of factors, many of them outside of the control of the TNSP, such as generator dispatch patterns. For this reason it is often only possible to identify the year in which the constraint is forecast to first occur, and the maximum extent of the forecast constraint given a specified set of power system conditions.

The additional planning work required to produce the information being requested will result in an increase in workload for the TNSPs. Determination of the information would require the conducting of detailed planning studies for each future network limitation each year, in advance of when they would otherwise be required to support an investment decision. It would also need to be repeated at a later time when an investment decision is actually required. While the cost of this additional work hasn't been estimated at this point in time, there is no doubt that it would result in material increases to TNSPs' operating costs.

Congestion information for interconnectors and other main transmission pathways is complicated by two further factors:

1. congestion is dependent on the relevant scenarios (generation and economic) selected; and

2. AEMO will be forecasting interconnector congestion separately in preparing the NTNDP. This creates the potential for confusion if even slightly differing information is published by independent sources.

Grid Australia's view is that TNSP's cannot be held liable for investment decisions made by participants using the additional information provided. That is, in the scenario where TNSP's seek to contract for network support, it should be clearly understood that the actual amount of DM purchased to manage congestion may differ materially from the forecast information in the APR due to changes in actual load and or generation on the network at the time and a range of other input assumptions.

Given the uncertainty over the accuracy of the information, Grid Australia questions the value of the additional information to demand side participants.

Requiring the additional information to be presented in financial years may also cause confusion. This is because constraints typically emerge during summer or winter peak load periods and it is possible that providers of network support services would be contracted for these periods, and not simply for financial years. Therefore Grid Australia considers that the additional information would be more useful if it is required to be presented in peak load periods rather than financial years.

The Rule as drafted requires the additional DM information to be provided in respect of all constraints forecast to emerge out to five years. Grid Australia considers that the proposed requirement for additional information should be subject to a "usefulness" or "materiality" test to avoid a significant administration overhead for potentially minor benefit. That is, the additional information should only be provided for those constraints where it is reasonably likely to be useful to assist potential providers of network support services to provide non-network solutions to address the constraint. Examples of constraints for which the provision of the information would not be "useful" include constraints:

- in a DNSP's network that give rise to minor works in the TNSP's network;

- brought about by rapid load increases or spot loads;

- for which similar information has been provided elsewhere (e.g. in a current RFP or Application Notice); or

- for which the additional information would be otherwise not useful (e.g. a complex constraint as described above or a constraint forecast to emerge more than a year outside the lead time of a reasonable solution).

Taking the above comments into account Grid Australia therefore suggests that the Commission consider alternative drafting of this element of the Rule change relating to the provision of additional information in APRs. Representatives of Grid Australia would be pleased to assist the Commission to develop a form of wording that might better achieve the NEM objective.

Should the Commission proceed with these changes, it is also important that any additional information requirements are not required until the 2010 APRs. This is because TNSPs are

already well advanced in the task of preparing their 2009 APRs, which must be published by 30 June 2009.

3. AER to accept forecast of network support payments based on previous regulatory period that continue into the next

The AEMC has proposed an obligation on the AER to accept future network support payments that are based on a TNSP's commitment to continue that service into the forecast regulatory period.

Grid Australia supports this proposal as it improves regulatory certainty for TNSPs with respect to the recovery of network support payments over consecutive regulatory periods. This contributes further to improving the overall efficiency of the revenue determination process.

For TNSPs the uncertainty inherent in funding these network support services from future opex is a key regulatory risk, and providing automatic approval gives TNSP's certainty about longer term costs. This will allow TNSPs to factor demand management into options analysis over longer periods (and not just within each regulatory period), which will strengthen the chances of DM emerging as part of the best solution.

4. Integrating DM activities into revenue determinations

The AEMC proposes that TNSP's set out non-network alternatives in their Revenue Proposals, in order to improve transparency and to ensure that the non-network alternatives are appropriately considered. While Grid Australia supports this proposal, it is concerned that detailed analysis and consideration of non-credible alternatives is not prudent or economically efficient.

Grid Australia's observation is that at the time of a TNSP's submission of its Revenue Proposal, many constraints may not have undergone a Regulatory Test process and as such the market would not have been tested in regard to the non-network alternatives.

More importantly, non-network alternatives for where there is either no proponent, or no reasonable likelihood of a proponent coming forward to deliver such alternative in the timeframe required, must be considered non-credible by a TNSP.

Therefore Grid Australia proposes that this requirement be limited to non-network alternatives which are *"credible options"* where the term *"credible option"* is as (proposed to be) defined in the Rules. Specifically Grid Australia suggests the following:

> "… A requirement on TNSPs to set out any non-network alternative which is a *credible option* in their Revenue Proposals and a requirement on the AER to consider the extent to which TNSPs have considered, and made provision for, *non-network alternatives."*

As noted above, the AEMC also proposes a new obligation for the AER. When assessing proposed capital and operating expenditure in a revenue proposal, it must consider the extent to which the TNSP has demonstrated, and made provision for, non-network alternatives.

As DM is always considered in the mix of options proposed for meeting network limitations, Grid Australia would accept this element of the proposed Rule change in principle. Notwithstanding that Grid Australia supports this element of the proposed Rule change, it is not clear to Grid Australia to what 'extent' non-network alternatives must be considered before the AER would

consider a challenge to the forecast expenditure under the Rule as drafted. Grid Australia considers that this needs to be clarified.

Grid Australia would welcome further opportunities to engage with the AEMC in the relation to this Rule change. Should you require any further information or input, please do not hesitate to contact Simon Appleby on 08 8404 7324.

Yours sincerely,

Rainer Korte
Chairman
Grid Australia Regulatory Managers Group