

28 March 2008

Dr John Tamblyn  
Chairman  
Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235

Dear John

**NEMMCO Submission on draft NERA Report -  
“Review of the Role of Demand Side Participation in the National Electricity Market”**

Thank you for the opportunity to comment on the draft NERA report commissioned for Stage 1 of the AEMC’s review of Demand Side Participation (DSP) in the NEM.

NEMMCO supports the aims of this review in facilitating more efficient demand side participation in the NEM. The draft NERA report and its draft recommendations represent an important first step in the review process, providing a basis for further industry consultation on possible impediments to, and measures to improve, demand side participation across a number of market areas currently the subject of separate major reviews<sup>1</sup>.

NEMMCO has comments on a number of the draft recommendations that propose changes in the areas of:

- Extension of the National Transmission Planner role
- Provision of Enhanced Network Transfer Capability Information
- Improved Access to DSP Information

These comments and any suggested changes are discussed in Section 1 of this submission.

NEMMCO has also identified a number of terminology-related errors in the report that we recommend be clarified to ensure that the work is founded on a sound understanding of the current arrangements. These are covered in Section 2 of the submission.

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<sup>1</sup> National Transmission Planner review (AEMC), Congestion Management review (AEMC), Comprehensive Reliability review (Reliability Panel) and the Network Support and Control Services review (NEMMCO)

If you wish to discuss any of the matters, please do not hesitate to contact Mark Johnston/Head of NEM Development on (03) 9848 8615.

Yours sincerely

A handwritten signature in black ink that reads "S.D. Waterson". The signature is written in a cursive style with a long horizontal flourish at the end.

**David Waterson  
General Manager  
Development & Strategy**

## 1. Comments on the Draft Recommendations

### 1. Extension of the National Transmission Planner role

Some of the proposed obligations for the National Transmission Planner (NTP) suggest a significant transfer of functions, expertise and information from the Transmission Network Service Provider (TNSP) to the NTP.

#### Preparation of Connection Point Forecasts

The report proposes<sup>2</sup> that the NTP develop connection point demand forecasts that account for DSP, based on a methodology developed by the NTP. This would have the effect of shifting the obligation for producing connection point demand forecasts from the TNSPs to the NTP.

The report also proposes<sup>3</sup> that the NTP be given the responsibility to define the network transfer capability at each connection point, and to prepare and publish forecasts of how these will change over time. These tasks would incur significant effort and require full disclosure by TNSPs of existing network capability, the impact of committed augmentations and new connections. An obligation on TNSPs to provide this data would need to be provided for in a policy of this nature.

#### Evaluation of Non-Network Options

The report proposes<sup>4</sup> that the NTP be required to identify and evaluate non-network options. For the NTP to achieve this there would have to be sufficient information made available from the TNSPs for the NTP to be able to understand and investigate the emerging needs and assess whether the non-network option represents a viable means of addressing those emerging needs.

This would require a greater exchange of information between TNSPs and the NTP than currently occurs between TNSPs and NEMMCO. Obligations would need to be placed on TNSPs to provide the NTP with the required information.

### 2. Provision of Enhanced Network Transfer Capability Information

Section 5.1 of the report notes that a lack of specific information on current and prospective network transfer capability may make it difficult for demand side proponents to effectively identify and assess opportunities for DSP investment.

NEMMCO already provides a number of sources of this type of information via our website<sup>5</sup>, in addition to offering market education workshops to assist in understanding of network constraint information.

However where additional information can be provided to further enhance this service, NEMMCO would be happy to work with the AEMC and relevant stakeholders to understand the requirements.

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<sup>2</sup> Refer Draft Recommendation in Section 4.3.2 (pg 35)

<sup>3</sup> Refer Draft Recommendation in Section 5.1 (pg 42)

<sup>4</sup> Refer Draft Recommendation in Section 4.3.2 (pg 35)

<sup>5</sup> For example, NEMMCO publishes Network Ratings and Outage information at:  
[http://www.nemmco.com.au/transmission\\_distribution/transmission.htm#NOS](http://www.nemmco.com.au/transmission_distribution/transmission.htm#NOS)

We assume that a complete description of transfer capability over a particular network element or set of network elements is likely to take the form of a complex limit equations that take into account various factors such as the relative dispatch of generation, the distribution of loads, load power factor, ambient temperature conditions and so on.

It is unclear from the report whether the provision of complex limit equations would assist DSP proponents to any greater extent than the information that is already made available through the current network planning process, whereby emerging network congestion issues are highlighted in the Annual Planning Reports published by jurisdictional planning bodies (JPBs).

The assumed outcome being sought through NERA's proposal for the provision of network transfer capability at distribution connections points, the more fundamental question of what information the demand side proponents require in order to develop commercial proposals for DSP investment opportunities.

NEMMCO suggests that consultation with potential demand side proponents should be undertaken to further understand their information needs, including whether network transfer capability is really a key requirement in either the historical or forward looking sense. That exercise, and potentially some pilot studies to validate any options put forward, should be considered before concluding that it is warranted to commit the NTP to the exercise of producing limit equations for each network connection point.

### **3. Improved Access to DSP Information**

NEMMCO supports the proposal<sup>6</sup> to oblige Retailers to confidentially disclose their contracted levels of DSP to NEMMCO.

There may also be merit in requiring Retailers to confidentially share this information with JPBs and TNSPs to ensure that the DSP amounts are correctly accounted for when those parties are producing demand forecasts.

Consideration should also be given to extending the obligation to disclose DSP information to demand response aggregators, NSPs and Market Customers, as these parties can contract directly with each other to provide DSP without involving a Retailer. This measure may address an undesirable outcome where contracted DSP would be potentially double-counted.

Note that NEMMCO currently relies on the provisions in Clause 3.13.3(t) of the National Electricity Rules to obtain DSP information for the purposes of the annual Statement of Opportunities (SOO). This Rule places general obligations on Scheduled Generators, NSPs and Market Participants to supply NEMMCO with data for the SOO. The scope of data covered is qualified by Clause 3.13.3(q) which does not explicitly refer to DSP.

These provisions have the following effects:

- Not all parties involved in procuring DSP have obligations to provide information to NEMMCO;
- The provision does not explicitly allow information to be shared with JPBs; and
- The provisions do not explicitly address DSP

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<sup>6</sup> Refer Draft Recommendation in Section 6.5.2 (pg 50)

## 2. Terminology Errors in the Report

### Network Security

Section 5.3 of the report discusses the apparent lack of clarity in the responsibilities between TNSPs and NEMMCO for the procurement of network support and control services (NSCS). NEMMCO agrees that there is scope for clarifying these responsibilities through the NSCS review that NEMMCO will be commencing shortly.

However it appears that Section 5.3 of the report may have unintentionally overstated this issue, by generically referring to the relative responsibilities for network security and reliability rather than simply NSCS. NEMMCO considers that the National Electricity Law<sup>7</sup> makes it clear that NEMMCO is charged with the responsibility for power system security.

### Minimum Reserve Level (MRL)

At various locations in Section 6.5 the NERA report incorrectly describes the manner in which DSP is taken into account by NEMMCO in managing power system reliability. In general this Section appears to confuse the treatment of DSP in determining the minimum reserve levels of the NEM with the treatment of DSP in determining available reserves.

As explained in Section 3.4.4 of the report, "Minimum Reserve Level Recalculation 2006 - by ROAM Consulting"<sup>8</sup> the DSP available to the NEM is not explicitly considered in determining the minimum reserve level settings for each NEM region – in other words, zero demand-side response is assumed in the MRL calculations.

However the DSP available to the NEM is explicitly considered in the regular assessments of reserve adequacy<sup>9</sup>, as it effectively reduces the forecast maximum demand. In this way the amount of DSP available allows for a lower level of installed generation capacity to deliver the required minimum reserve level.

NEMMCO continues to explore ways of improving the treatment of DSP in the determination of available reserves through the reserve adequacy assessment process.

The Reliability Panel, in its final report on the Comprehensive Reliability Review, announced that it would form a taskforce to review the MRL calculation methodology. NEMMCO intends to support the work of this taskforce, but does not expect it to examine the representation of DSP.

### Network Reliability Standards

Section on 2.5 on page 15 of the report includes a statement that:

*"These network planning arrangements form the basis for network investment decisions, as NSP's seek to meet the network reliability standard, as determined by the Reliability Panel".*

NEMMCO notes here that the jurisdictional network reliability standards are also a significant driver for network investment by NSPs, and hence should also be referred to in the final report.

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<sup>7</sup> Clause 49(1)(e) of the National Electricity Law

<sup>8</sup> <http://www.nemmco.com.au/powersystemops/249-0002.pdf>

<sup>9</sup> This process is called the Projected Assessment of System Adequacy (PASA), which compares available generation reserves against the minimum reserve levels