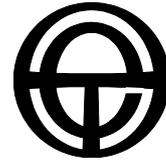


**TOTAL ENVIRONMENT CENTRE INC.**  
LEVEL 4, 78 LIVERPOOL STREET, SYDNEY, NSW 2000  
PO BOX A176, SYDNEY SOUTH 1235  
Ph: 02 9261 3437 Fax 02 9261 3990  
[www.tec.org.au](http://www.tec.org.au)



## **SUBMISSION**

### **Australian Energy Market Commission**

#### **National Transmission Planner**

##### Scoping Paper

**14 September 2007**

For further information contact:

Glyn Mather  
Ph 02 9261 3437  
Email [glyn.mather@tec.org.au](mailto:glyn.mather@tec.org.au)

# National Transmission Planner Scoping Paper

## 1. Introduction

Total Environment Centre (TEC) is pleased to be given the opportunity to comment on the scope of the proposed National Energy Market Operator. We strongly believe that any move to a new national transmission planner would be a lost opportunity if the core principles of this new body did not include demand management (DM) as a priority focus. Adopting such a focus will entail investing in substantial new DM expertise within the new planning body to ensure that DM is properly integrated into its functions. In particular, the planner should guarantee that DM is considered *before* augmentation options are explored. It would also mean entrenching far greater transparency in transmission network operations, forecasting and reporting, to ensure that the new national planner does not merely accept as a given that new augmentation is required in all circumstances. In short, a new national transmission planner should actively counterbalance the overwhelming supply-side focus that currently exists in network planning.

In this submission we have addressed specific issues, including: the National Transmission Plan; the Regulatory Test; and the name of the new authority.

Our recommendations are, in summary:

- National transmission planning will only be a positive step forward if the move addresses the National Electricity Market objective to achieve efficiency 'in the use' of electricity. If such a body simply replicates current supply-focused planning, then it merely locks in an expensive, wasteful approach to transmission network planning, where massive infrastructure is built to service peak demand, and more cost-effective demand management options are sidelined. Non-network alternatives – particularly demand management – should always be the first consideration of such a network planning body.
- Greater transparency in transmission network operations, forecasting and reporting is required to improve the consideration of DM and, as a result, the efficiency of transmission network planning.
- Incentives must be developed for the networks to take up non-network alternatives.
- In the Regulatory Test, new arrangements should be established to adequately weigh the costs and benefits of non-network alternatives; the reliability and market benefit criteria could be retained with the addition of provisions for consideration of wider benefits.
- The name of the new authority should better express its function: "National Energy Market Operator" is confusing and overly general and is too similar to the "National Energy Market Management Corporation" (NEMMCO).

## 2. National Transmission Planning

TEC supports the concept of national transmission plans in the interests of promoting efficiency across the NEM, depending on several conditions being met. Centralised and external planning could better meet the long-term interests of consumers if it ensured that reducing unnecessary augmentations through the delivery of cost-effective demand management was core to its brief. A new planner would also need to deliver vastly improved transparency of decision making over the current situation to add value.

Transmission planning currently occurs in an ad hoc fashion, notwithstanding the Annual Transmission National Transmission Statement (ANTS), since forecasting is generally based on transmission businesses' own projections. These businesses operate as commercial enterprises – and are monopolies – and therefore their interest is to increase revenue, which is currently achieved by constantly expanding their networks. As businesses, their operations – in particular their planning systems – are inappropriately opaque and could benefit from more transparency.

In order for a National Transmission Planner to improve on the current situation, it would need to break the automatic link between the transmission businesses' own projections and what could be achieved with the full utilisation of demand management.

Non-network alternatives which meet the needs of demand and the lowest-achievable augmentation option should always be the first consideration in any network planning.

Neglect of demand management (DM) is a pervasive problem throughout the National Electricity Rules, despite professed intentions that demand side options should be given "due and reasonable consideration". The National Electricity Rules state, for instance:

*6.2.3 Principles for regulation of transmission aggregate revenue (d) "The regulatory regime to be administered by the AER ... must also have regard to the need to: (2) create an environment in which generation, energy storage, demand side options and network augmentation options are given due and reasonable consideration;"*

While purporting openness to DM, this form of generic statement falls short of an active engagement of DM. In particular, lack of incentive mechanisms for the implementation of non-network solutions is resulting in inefficient, peak-driven transmission infrastructure investments. The NEM is inappropriately focused on the supply of electricity at the expense of a focus on the provision of energy services, thus excluding demand-side or other non-network approaches. Little has changed in this regard since the Parer report<sup>1</sup> noted:

*A key feature of competitive markets is the active participation of both the supply and demand sides. Without this, competition is blunted and the potential for the exercise of market power is enhanced. ... Many submissions to the Review contended that demand side involvement in the NEM is under-developed.*

---

<sup>1</sup> Commonwealth of Australia, *Towards a Truly National and Efficient Energy Market*, 2002, p 173

These flaws could be somewhat rectified by embedding DM as a core priority for the new national transmission planning body. In the interests of efficiency, transmission network service providers (TNSPs) should be required to investigate non-network solutions before proceeding with supply-side solutions. As the Scoping Paper notes, the ANTS only considers augmentation or no augmentation options; and net market benefits. It therefore does not promote – or even consider – non-network alternatives at all. This is a serious flaw and should be rectified in the new arrangements.

### **3. National Generation Planning**

We would only support the concept of national generation planning if a core focus is the development of a more diverse, sustainable system which assesses new generation as the last option, after the full potential of energy efficiency and demand management is realised. Such national generation planning would need to adopt mechanisms to ensure that low-emissions generation is given priority over polluting generation options.

It is appropriate that in the move to a truly national market, generation capacity should equally be addressed at a national level, rather than a local level. Although VENCORP and ESIPC's roles may not change, there should be a strategic assessment of their planning decisions at a national level, so NEMO should act as the final arbiter with regulation devolved to the AER (unless NEMO is given regulatory powers).

We note further that the role of the AER in the new arrangements is not clarified, which begs the question of how monitoring and compliance are to be ensured. If there is no regulatory power vested in a national authority, then there are no guarantees that the national plans will be implemented. The AER would be the logical regulator as they are already responsible for regulation of transmission businesses.

A national approach is particularly important at this time of concern about climate change, since small, distributed generation projects across Australia can reduce unnecessary transmission losses and, by extension, the unnecessary production of greenhouse emissions while contributing to the national provision of electricity. The over-emphasis and reliance on large coal-fired and gas generators must be addressed if Australia is to properly tackle our greenhouse gas emissions. The NEM is not external to this, but an intrinsic component.

In addition, there must be incentives developed for the networks and generators to take up non-network alternatives; it is not sufficient to enforce such a principle, since these businesses have a tradition of doing the business they know well rather than risking ventures in which they may have limited experience. Service incentives are being developed for transmission businesses in relation to market impact; similar incentives could be developed for DM.

### **5. Assessment of Regulatory Test**

In any assessment of changes to the Regulatory Test – or its replacement – the failure of transmission networks to utilise non-network alternatives must be addressed as a priority.

The purpose of the Regulatory Test is defined in the National Electricity Rules as identifying “new network investments or non-network alternative options” (Clause

5.6.5A). In theory, the Test could be used to address the problems we have raised about non-network alternatives, but in practice it is rarely applied by the AER to promote these options. As noted in the Scoping Paper, the restriction to the two limbs (reliability and market benefit) is overly narrow and does not allow for assessment of other benefits; and it is self-evident that the benefits should include national benefits, not just local ones.

Moreover, the provisions in the Rules give equal weight to “those who produce, consume and transport electricity” (5.6.5A[b][1]). This seems to be in direct contradiction to the Objective, which highlights the importance of the long term interests of consumers. The provisions also do not include demand side options as a necessity in any assessment of costs or benefits. For instance, Clause 5.6.5A(c)(8) states that alternative options “may include ... demand side management ...” (our emphasis). This does not represent encouragement to investigate alternatives, but rather allows the NSP to consider them *if they choose to do so*. As a rule, NSPs choose *not* to do so. This could be rectified in a revised network planning process.

In addition, the narrow definition of the two limbs can lead to uncertainty as to which limb requirements would apply in these cases.

“Least cost” and “net present value” are not the only principles that can bring efficiency and benefits, and certainly do not fully address the NEM objective of efficiency ‘in the use of’ electricity. It is essential that DM beyond simple reliability or market benefits be allowed – requiring that the total cost of a DM arrangement used by networks be justified by these two benefits ignores the potential for other benefit types that could accrue, that is, they do not allow for other benefit streams that could provide the rest of the justification. In the case of DM, there is a very good likelihood that the DM will be used for purposes beyond the network benefit it provides.

Additionally, there should be provision for the potential for multiple proponents, since DM arrangements could include more than one (the reliability limb currently allows for only one proponent).

In summary, the current Regulatory Test makes it very difficult for network businesses to have the costs and benefits of DM approaches considered as benefits. New arrangements should be established to adequately weigh the costs and benefits of non-network alternatives, whatever the new arrangements for assessment of investment. We therefore recommend retaining the reliability and market benefit criteria, but add provisions for consideration of wider benefits.

## **2. Name of the new authority**

The proposed name for the new national authority – the National Energy Market Operator (NEMO) – is misleading and confusing. It is too similar to the “National Energy Market Management Corporation” (NEMMCO), which could make differentiation between the two bodies difficult. It also does not accurately describe its function: it is clearly not intended to be an “operator” but a planning authority. “National Transmission Planner”, or some similar title, would be more appropriate so that its functions are transparent; unless the long-term intention is to include distribution network planning in its remit as well, in which case “National Network Planner” would be a better fit. The Scoping Paper notes

that a National Transmission Planner will be located within the new NEMO (p. 9), but the functions of NEMO apart from transmission planning are not clearly elaborated. This makes it difficult to accurately assess its role.