

ELECTRICITY TRANSMISSION NETWORK owners

MCE National Framework for Distribution Networks

**Response to MCE's National Framework for Distribution
Networks: Network Planning and Connection Arrangements**

October 2007



1. Introduction and Overview

This submission is made by the Electricity Transmission Network Owners Forum, which comprises ElectraNet Pty Limited, Powerlink Queensland, SP AusNet, Transend Networks Pty Ltd and TransGrid ("ETNOF"). Collectively, this group own and operate over 40,000 km of high voltage transmission lines and have assets in service with a current regulatory value in excess of \$9.1 billion. ETNOF welcomes the opportunity to respond to the Ministerial Council on Energy (MCE) Network Planning and Connection Arrangements: National Frameworks for Distribution Networks Independent Report (Report).

ETNOF understands the purpose of the Report is to identify issues relating to a new national framework for distribution network expansion and planning, connection charges and capital works contributions. As there has been a consistent NEM-wide framework for dealing with these issues in electricity transmission networks for some years now, ETNOF wishes to highlight several matters where the experiences in transmission can usefully inform policy development in relation to distribution networks.

In summary ETNOF raises the following issues:

- the existing capital cost thresholds at which network businesses undertake public consultation of Regulatory Test results should not be assumed to be an appropriate starting point for designing distribution network consultation processes. ETNOF considers there is sufficient evidence that the existing thresholds are too low and should be raised and that Recommendations 3 and 4 of the Report should not be adopted;
- there is already significant information available in the public domain that highlights emerging network needs. Instead of requiring even greater information disclosure of these matters, ETNOF considers there is a need to critically review the incentives for adopting non-network solutions to ensure there is no inappropriate bias against these alternatives;
- information provision is not costless and any additional costs will be borne by customers. ETNOF considers that any proposals to increase the amount, type and frequency of information disclosure should be assessed against the NEM Objective;
- ETNOF agrees that the processes for negotiating connection to the network should be consistent as between distribution networks and transmission networks. Extending the Rules connection process to achieve this outcome is supported. Concerns about technical and commercial complexity for small customers can be addressed by the use of standard contracts;
- similarly, ETNOF supports the adoption of consistent pricing principles to apply regardless of whether customers connect to distribution networks or transmission networks. Consistent with this principle, ETNOF believes that augmentations to the shared network that result from new connections should be justified through the Regulatory Test and the costs attributed in the normal manner. That is, there should not be any specially targeted allocation of shared network costs; and

- ETNOF supports the proposal to clarify the operation of clause 5.3 of the Rules along the lines suggested in the Report, so that modifications to a connection do not necessarily require renegotiation of all terms and conditions of the connection access agreement.

2. Threshold

In light of experience to date in applying the Regulatory Test and conducting public consultations on proposed network augmentations, ETNOF disagrees with Recommendations 3 and 4 of the Report. The recommendations would require DNSPs to conduct public consultation on options for distribution network augmentations with a capital cost in excess of \$2 million. The Report appears to assume that the existing thresholds applicable to transmission network augmentations are appropriate and then effectively “scales down” these thresholds for distribution networks. However, no analysis, is presented to demonstrate that the proposed thresholds are appropriate or otherwise.

ETNOF's collective experience with applying the Regulatory Test and public consultation processes over the last six years clearly indicates that the overwhelming majority of opportunities for efficient non-network alternatives arise at thresholds much greater than the current thresholds established in the Rules. Data from ETNOF businesses in relation to all¹ new transmission network consultations demonstrates that:

- a total of 111 submissions were received in response to formal Regulatory Test consultations undertaken under the Rules in relation to 144 identified emerging needs;
- 64% of the submissions received through the Application Notice/Final Report process related to routine and uncontroversial matters. The remaining 36% offered potential non-network options; and
- of the 110 submissions received in response to consultations on identified emerging limitations in the new large network augmentation category since 2001, only 7 proposals across the entire National Electricity Market were demonstrably commercially and technically feasible. These non-network options were made in response to transmission line augmentations estimated to cost over \$33 million (\$2001/02), rather than transformer or capacitor bank installations. Specifically, the Regulatory Test analysis and consultation resulted in recommendations to construct new large network assets estimated to cost \$33 million, \$48.9 million, \$73 million, \$320 million and \$340.4 million, respectively.

Contrary to the Report's recommendation, ETNOF's experience suggests that the existing network asset thresholds in the Rules should be increased. This view was supported by the AEMC in its Draft Rule Determination on Transmission Network Replacement and Reconfiguration². As part of that consultation the AEMC indicated that it considered the existing thresholds were too low.

¹ Small transmission network assets (> \$1 million) and large transmission network assets (> \$10 million)

² AEMC (2006), Draft Rule Determination, Transmission Network Replacement and Reconfiguration, March, p10

3. Take up of Non-Network Solutions

The Report identifies that New South Wales (NSW) has a threshold of \$200,000 for economic evaluation, consultation and reporting on a case-by-case basis. The Report concludes that this does not appear to provide a filtering process to consider where non-network options may be economic, but instead operates as a catch-all. As such, the threshold imposes additional costs for no identifiable benefits. These additional costs are ultimately borne by customers.

The main aim of a threshold should be to ensure that Network Service Providers (NSPs) continue to fulfil their main obligation of providing reliable network services, without onerous processes to justify network solutions against a possible inundation of infeasible non-network proposals. However, this goal must be pursued while at the same time ensuring that genuine proponents are not excluded from providing a service. Regardless of what option may ultimately be adopted, any requirement to provide and publish data imposes additional costs which should be tested against the NEM Objective.

Given the information currently available in the public domain with the existing provisions in the Rules, ETNOF considers that the lack of uptake of non-network solutions is more to do with investment incentives than a lack of information. Most transmission businesses have now implemented, or are implementing substantive, non-network alternatives to network augmentations. This success has been the result of sound commercial propositions being offered and where appropriate incentives have existed for both parties. It has not been the result of mere information provision. The AEMC has also identified investment incentives as a potential issue through the Congestion Management Review³. In particular, the AEMC suggests that instead of being treated as an operational expense, the cost of non-network alternatives could be capitalised. The effect of this would be to equalise the incentives of network and non-network solutions from a NSP's perspective.

4. Spare Network Capacity

It is not clear to ETNOF how specific numeric information can be provided to interested parties through the generalised process proposed in the Report.

Significant NSP effort is likely to be required to fulfil an obligation to publish spare capacity at different points throughout a network. In addition, the results of this analysis would only hold meaning within the bounds of the assumptions adopted at the time of the analysis, such as network configuration, forecast loads and any new connections. Extrapolation of results beyond this would potentially lead to incorrect results/assumptions.

For example, if each point in a meshed network is assessed independently of all other points, the true surplus capacity across the whole network will be very much less than the simple sum of those independent assessments. This is because any additional load or generation placed at one point will necessarily impact on the surplus capacity available at other points.

ETNOF acknowledges that on face value the requirement in Recommendation 2 of the Report to publish spare capacity at different points throughout the network appears straightforward. However, to the extent that distribution networks are meshed (even lightly meshed), the analysis and interpretation of the results is more problematic.

ETNOF believes that Recommendation 2 should remove the need to publish spare capacity at different points throughout a network. In relation to other aspects of the recommendation, more detail on the timeframes and timeliness of updates to the NEM are required in order to understand the full impact of the requirements.

³ AEMC (2007), Congestion Management Review, Draft Report, September

5. Statement of Specific Requirements

ETNOF notes comments within the Report that if the costs of a likely network solution are published, a proponent may not bid the cost of their option, but rather an amount that is just below the network solution cost. Even if this was to occur customers would be no worse off.⁴

ETNOF is concerned that while this approach may be valid from the perspective of economic theory it fails to ensure a competitive process to deliver the lowest cost outcome to consumers. If it can only be argued that consumers will be no worse off (but arguably no better off either), then there seems little justification in requiring NSPs to publish expected cost information as part of their Requests for Proposals.

6. Rules Connection Application Process

ETNOF supports the expansion of the Rules connection application process to accommodate user connection requirements below 5MW and notes that the framework already exists in the Rules. ETNOF also supports the position that the principles to facilitate connection and the associated charges with that connection should be the same for all customers, irrespective of their relative size and should reflect the efficient costs associated with providing the connection. The principles should also be the same, whether the customer is seeking to connect to the network via a DNSP or TNSP.

However, the Report suggests that the Rules connection application process is overly complex and prescriptive. ETNOF does not support this position. ETNOF's view is that the process, whilst prescriptive, is consistent yet flexible enough to accommodate the varying requirements of users.

ETNOF notes that for customers below 5MW the administration costs associated with individually negotiated connection contracts may not be efficient. The use of standard contracts for classes of small connection customers which are subject to regulatory approval from time to time would minimise this inefficiency and are a feature of most state jurisdictional requirements. Arguably, these standard contracts for small network customers could include uniform technical standards where these standards differ from those set out in the Rules for large network users (either for loads or generation).

The Report also suggests that the process requires intensive negotiation of technical and other terms of connection. ETNOF considers that negotiation of commercial terms and conditions, charges and technical terms to connect are important components in the process to connect. Connection timelines are clearly matters that should be commercially settled, and are not a matter for the Rules to specify. Therefore, ETNOF cautions against requiring the DNSP to commit to a date by which the connection will be effected.

ETNOF supports the general approach that, for small customers, it may be appropriate to deal with technical standards on the basis suggested. That is, utilising standard contracts (and therefore technical requirements) for standard classes of customer.

7. Connection Charges Framework

ETNOF supports the view that the principles for all connections to the network should be the same, irrespective of customer size or location in the NEM. Therefore, the basis for charges should also be consistent. The Rules set out the principles and methodologies for connection charges above 5 MW. These arrangements could similarly accommodate smaller connections (both load and generation) with minimal variation.

⁴ Network Planning and Connection Arrangements – National Framework for Distribution Networks p29

ETNOF also supports the principle that connection customers should pay for the dedicated connection costs associated with their connection to the network. This should include the cost of the dedicated connection assets as well as their operation, maintenance and replacement over the life of the assets.

However, ETNOF does not support the Report's position on shared costs, with respect to augmentations of the shared network that might arise in connecting the load or generation. These costs are subject to the Regulatory Test and are investments which should be made by the DNSP or TNSP where justified. Where these investments are justified under the Regulatory Test they should be treated in the same manner as other augmentations to the shared network.

Further, the National Electricity Market regulatory framework sets out that generation connections are shallow connections. Charging small generation applicants for shared network augmentation is inconsistent with this principle. The fact that a particular connection location is constrained provides a non-price locational signal for generation. ETNOF also notes that the Rules contain provisions for augmenting the shared network where a generation (or load) proponent requires a standard higher than that provided by the NSP. The costs of such augmentations are to be funded by the proponent.

8. Clarification Required

ETNOF notes that clause 5.3 of the Rules applies to connection modifications as well as connection applications. Whilst arguably outside the scope of the Report, ETNOF agrees that it is unclear as to whether all terms of a connection arrangement are re-opened as part of a connection modification or just the subset of those terms and conditions pertaining to the modification. Clarification of clause 5.3 of the Rules would remove this uncertainty.