APPENDIX 6

Jurisdictional network performance requirements

JURISDICTIONAL NETWORK PERFORMANCE REQUIREMENTS

The jurisdictional network performance requirements were developed over a two year period, with a comprehensive review and public consultation process. The Reliability and Network Planning Panel (RNPP) conducted the review and made recommendations to the Regulator on the transmission planning and security criteria to apply in Tasmania.[1] The Regulator accepted the recommendations of the RNPP and legislative outcome was sought. The jurisdiction developed regulations based on the recommendations of the RNPP and implemented regulations under the ESI Act. The *Electricity Supply Industry (Network Performance Requirements) Regulations 2007* (regulations) were enacted in December 2007. Prior to implementation of the regulations, Transend had incorporated into its planning process the recommendations in the RNPP's final report.[2]

The object of these regulations is to specify, for the prescribed transmission service, the minimum network performance requirements that a planned power system of a Transmission Network Service Provider must meet in order to satisfy the reliability limb of the regulatory test in the National Electricity Rules.

Under the terms of its licence issued by the jurisdictional regulator, Transend is required to comply with the regulations. The following minimum performance requirements must be met:

- no credible contingency event will interrupt more than 25 MW of load;
- no single asset failure will interrupt more that 850 MW or, in any event, cause a system black;
- the unserved energy to loads interrupted as a result of damage to a network element related to a credible contingency event must not exceed 300 MWh;
- the unserved energy to loads interrupted as a result of a single asset failure must not exceed 300 MWh; and
- where a network element has been withdrawn from service for replacement, maintenance or repair, the energy exposed to interruption by a credible contingency event must not exceed 18000 MWh.

The regulations set out requirements that are performance-based; that is, they limit either the size of customer load that may lose supply in certain circumstances, or the length of interruption, or both. These requirements are not prescriptive in the sense that they do not specify the types of solutions that Transend should adopt in order to meet the criteria. In accordance with Transend's planning responsibilities and obligations, Transend plans and develops its transmission network to meet the requirements. The regulations provide justification for reliability driven augmentations of the transmission network under the reliability limb of the AER's regulatory test.

1 RNPP, *Transmission network security and planning criteria - Final Report*, July 2006. The Final Report was submitted to the Regulator on 4 August 2006.

2 Ibid.

The requirements are intended to apply to the shared transmission network and to those parts of the transmission network that supply the distribution system. These requirements do not apply to energy intensive customers connected directly to the transmission system as the level of performance of their connection is negotiated with the customers and specified in their connection agreements. Higher standards of performance requirements may be achievable in some instances under the market benefit limb of the regulatory test when the economic cost of interruptions to the relevant loads or load areas is particularly high.

A significant element of the requirements in the regulations specifies that Transend must apply to the Minister for approval of proposed augmentations which exceed $15 million[3] which Transend has factored into its future capital expenditure plans. Under section 6(3) of the regulations, the Minister's approval is taken to be an additional minimum network performance requirement. In effect, this provision has introduced in Tasmania a requirement to consider direct and indirect costs and benefits beyond the reliability driven requirements. The requirement improves the transparency of project assessments and provides an assurance to the jurisdiction that the regulated business is "not over-investing in the network at the expense of energy users" [4].

The RNPP stated in its 2007 Reliability Review released in April 2008 that it expects the adoption and use of the transmission network performance requirements will simplify the development process for transmission augmentations and improve the security of supply through increased redundancy for certain customer loads and the specification of maximum restoration times. Further, the RNPP recognises the coordinated approach to planning in Tasmania between Transend and Aurora and noted this process enables consideration of all relevant options to assess the most cost effective solution that achieves the network performance requirements.

The Electricity Supply Industry Reporting Guideline issued by the Regulator includes a requirement for Transend to report:

- actual performance in meeting the network performance requirements specified in the *Electricity Supply Industry (Network Performance Requirements) Regulations 2007*;
- an explanation for any failure to meet the requirements; and
- actions to be taken to ensure that the requirements will be met.

This is an annual reporting requirement and the Regulator uses the information supplied by Transend to create and publish the Electricity Supply Industry Annual Performance Report.

All of the factors described above influence the manner in which Transend operates and maintains its transmission system, and have a direct impact on the company's network performance, operational decisions and costs.

[3] Section 6 of the *Electricity Supply Industry (Network Performance Requirements) Regulations 2007* provides that Ministerial approval is required where the present value of the cost of constructing, operating and maintaining the proposed augmentation is estimated to exceed an NPV of $15 million.

[4] RNPP, *Transmission network security and planning criteria - Final Report*, July 2006, page 6.