

Our Ref: D11/113749
Your Ref:



3 February 2012

Mr John Pierce
Chair
Tasmanian ESI Expert Panel
GPO Box 123
HOBART TAS 7001

Dear Mr Pierce

Submission to ESI Expert Panel – Response to draft report

Transend Networks Pty Ltd (Transend) supports many of the ESI Expert Panel (the panel) findings outlined in its draft report published on 15 December 2011. Transend provides the following comments on the draft report.

1. Transend supports the Panel's view that Tasmania should remain closely aligned with the market and regulatory frameworks established across the National Electricity Market (NEM).
2. The board and staff of Transend are working to improve efficiency and productivity for the benefit of customers and shareholders. Integrating Transend and the distribution business of Aurora would require a sustained and intensive effort by the board and management team and could dilute the focus on efficiency and productivity.
3. If, as a result of other reforms, the distribution business is separated from the remainder of Aurora, Transend understands that formal integration of Transend and the Aurora distribution business may be considered and may be the most efficient outcome in the circumstances.
4. Transend has undertaken preliminary analysis of the reform path models put forward for consideration by the Panel. Our analysis identifies some serious complexities for Transend as operator of the Tasmanian transmission system that may arise from the preferred model (reform path 2). These matters are outlined in more detail in Appendix One.

Transend has also identified a small number of items in the draft report that we think should be corrected in the final report. However, these items are not material to the central themes of the draft report. We will provide these suggestions in a separate letter to the Panel.

Transend will be pleased to assist the Panel with further analysis in the lead-up to the publication of the final report. Transend stands ready to fully assist the Tasmanian Government to implement whatever the Government decides to do in responding to the ESI review.

Yours sincerely

A handwritten signature in blue ink that reads "Don Challen". The signature is written in a cursive, flowing style.

D.W. Challen
Chairman

Encl. – Appendix One

Appendix One

The Panel's position is that the best outcome for Tasmania will be if the electricity industry is operated at the most efficient level possible. Transend supports this position.

To achieve such an outcome, ideally the commercial incentives of each of the parties in the electricity industry supply chain, taken together, will deliver an efficient outcome. It is important to understand how both the physical and technical characteristics of the electricity supply chain in Tasmania relate to the commercial incentives of each of the entities involved. This includes incentives for optimal use of energy resource, generation plant, transmission capability, risk management instruments, Basslink, the system protection scheme (SPS), and demand-side considerations.

Below is a high level summary of matters for consideration with each reform path model proposed by the panel, from Transend's perspective. The considerations include a focus on the generation-related changes proposed, as this will have most impact on Transend's present commercial and operational arrangements.

ESI Expert Panel reform path	Considerations from transmission point of view
Reform path 1 - Regulation	<p>This reform path preserves the present arrangement where Tasmanian generators are responsible for dispatch of their plant. From Transend's understanding of the information provided, it is unlikely that this reform path would create any significant changes in the generation and transmission interaction, technically or commercially.</p>
Reform path 2 – GenTrader model	<p>This model preserves a dominant generator in Tasmania which will physically dispatch generation output, with two or more separate traders with rights to 'virtual' generation output capacity (which will presumably give the generator instructions regarding how much output to offer in a given trading interval and/or over time). The Panel has highlighted a number of areas for further consideration in finalising this model. Transend considers that these areas will need more analysis before the expected costs and benefits of the model can be fully understood.</p> <p>From a transmission perspective, it will be important to understand the obligations, opportunities and commercial drivers on the dominant generator under the new model, and ensure contracts between the generator and traders deliver efficient outcomes for the energy supply chain. Transend encourages the Panel to undertake further analysis in the following areas, given the potential impacts on Transend's operating environment:</p> <ul style="list-style-type: none"> • Treatment of frequency control ancillary services (FCAS) service provision and pricing, including in the context of efficient co-optimised energy and FCAS prices; how services to reverse flows over Basslink would be delivered and how this would affect Transend's transmission network. • The contractual arrangements between Transend, the generator and the traders, which will be more complex given the range of different obligations, incentives and risks involved.

ESI Expert Panel reform path	Considerations from transmission point of view
	<ul style="list-style-type: none"> • The contractual arrangements between the generator and traders to modify and fund generation plant and supporting transmission capacity over time. • Treatment of the commercial arrangements for the system protection scheme (SPS) and allocation of the value of these contracts between traders and/or the dominant generator. These include allocation of responsibility for availability and shedding payments (presently negotiated by Hydro Tasmania on a stand-alone basis or as part of an energy supply contract); and allocation of risk management associated with SPS failure. • Any changes required to Basslink commercial arrangements including funding of the facility fee and allocation of inter-regional settlements residues and any consequent impacts for Transend's business. • The contractual arrangements between the generator and traders regarding use of the energy resource over time, given differing inflow patterns and transmission network constraints and availability. In particular, to allow Transend to optimise availability of the transmission network and respond to market incentive schemes, generation dispatch should be relatively predictable given market conditions, water levels and physical availability of plant. • Allocation of rights over future access to services provided by the generation plant. There may be opportunities for the existing generation plant to provide new market services into the future (eg fault level and inertia services). It will therefore be important to understand whether/how the allocation of virtual energy output to the traders also confers rights to other services from generator operation. <p>When considering the matters above, Transend notes that the 'gentrader' model of allocating physical output to particular traders is more common in the NEM than the model put forward for consideration by the Panel where traders have access to 'virtual' output and the generator presumably bids particular plant into the market in real time to meet these bids. Under the 'gentrader' model, a trader enters into financial arrangements based on the generation characteristics of particular generation plant and resources, together with an understanding of the underlying transmission system that supports its contracted generator(s).</p> <p>From Transend's perspective, there is already considerable complexity in operational arrangements in the Tasmanian electricity supply chain, which arise from a number of factors including the dominance of geographically dispersed hydro-based generation plant, use of dynamic ratings to optimise use of the network, a large interconnector relative to Tasmanian load and a sophisticated SPS to enable flows over Basslink. This level of complexity is already disproportionate to the size of the Tasmanian electricity supply industry and creates a workload for the market operator AEMO substantially disproportionate to the size of Tasmanian operations.</p> <p>Transend questions the advisability of adding further complexity to Transend's operating environment and AEMO's operations through the Panel's proposed trader model.</p> <p>In contrast, a model where there is a matching of physical generation assets (and supporting water resource) with trading rights is likely to be involve more straightforward transmission connection agreements</p>

ESI Expert Panel reform path	Considerations from transmission point of view
	<p>and clearer operational arrangements between Transend, the generator and trader, for example with respect to negotiating outages. This reflects a simpler, more transparent supply chain with fewer parties involved in the dispatch and investment process for a given generation site. Alignment of generation output and trading would be likely to provide Transend with a customer that has clearer commercial arrangements to efficiently operate, dispatch and upgrade particular generators and supporting network over time.</p> <p>It may well be that the hydrological system management benefits from allocating 'virtual' capacity to traders, outlined in the Panel's preferred option, outweigh the possible benefits of traders having access to 'physical' capacity from particular generators. However, for completeness it may be useful to test the costs and benefits of alternative trader models.</p>
Reform path 3 – Vic-Tas region	<p>As the Panel notes, there is a large amount of work required to progress and implement this option.</p> <p>In the first instance, an obvious feature of this model is that Basslink's capacity would represent a significant physical constraint limiting flows within the Vic-Tas region. To ensure sufficient generation is dispatched in Tasmania to meet load and system stability requirements the Panel infers that a regulatory solution will still be required under this model (such as direction by AEMO or network support payments by Transend). In addition, the commercial and regulatory treatment of Basslink will need to be addressed.</p> <p>While Transend has not investigated this model in detail, the impact on the transmission charges of our customers, both in terms of the charging arising from a Vic-Tas region and revisions to marginal loss factors, would also need to be considered and may result in materially different charges.</p>