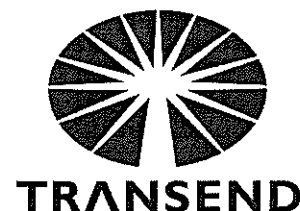


Our Ref: D10/60025

3 September 2010



Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney South
NSW 1235

Dear Mr Pierce

RE: Network Support and Control Ancillary Service Rule Change Proposal

As the owner and operator of the electricity transmission system in Tasmania, Transend welcomes the opportunity to respond to the AEMC's network support and control ancillary services (NSCAS) proposed rule change. Transend has contributed to and fully supports the Grid Australia submission in response to the NSCAS proposed rule change. This submission identifies technical issues relevant to the Tasmanian region as additional comments in response to the issues for consultation.

NSCAS for system security

Tasmania is connected to the national electricity market (NEM) via a single high voltage direct current interconnector (Basslink). Under the National Electricity Rules (Rules) in schedule 5.1 and 5.1a, TNSPs have planning and operating obligations to ensure security of supply and that the network is robust to credible contingencies. As noted in Transend's submission to the AEMC review of energy market frameworks in light of climate change policies second interim report, the Tasmanian power system is fundamentally different to other interconnected NEM regions by virtue of its small size, lack of generation diversity and reliance on network control schemes to maintain a secure operating state. Transend operates a number of network control schemes to manage this obligation. For example, two schemes that maximise the capability of the Tasmanian power system to cater for Basslink interconnector flows are the Network Control System Protection Scheme (NCSPS) and the Frequency Control System Protection Scheme (FCSPS). Tasmania has also started to develop automatic voltage control schemes¹ which make use of the mandated reactive requirement of generators in accordance with generator performance schedules. These examples demonstrate that a TNSP is responsible for providing the most efficient technical envelope within which AEMO operates the system to ensure system security, and is therefore best placed to provide these services. Transend would also like to ensure that any change to the Rules should not adversely affect existing services.

Funding and cost recovery of NSCAS

It will be important to recognise as part of this consultation the existing Rules relating to the treatment of Basslink as a market network service provider. For example, if NCAS is procured in the Tasmanian region to increase the exporting capacity on Basslink for the

¹ One example is the George Town Automatic Voltage Control Scheme (GTAVCS).

Victorian region, the funding model for inter-regional NSCAS will need to take into account the existing arrangements and clarify the appropriate benefiting parties/regions.

Managing system inertia and fault levels issues in Tasmania

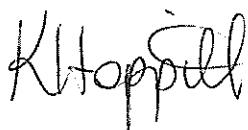
The Tasmanian jurisdiction responded to the significance of managing problems with system inertia and fault level as a consequence of new wind generation connection in Tasmania by establishing an Inertia Issues Working Group (IIWG). The IIWG was tasked to provide the jurisdiction's Electricity Technical Advisory Committee with advice on any issue that will or may result from a reduction in the system inertia of the Tasmanian power system resulting from the anticipated penetration of asynchronous (low inertia) renewable energy sources into the generation mix.² One of the recommended options in the paper recognises the importance of clarifying the provision of NSCAS under the Rules.

Transend has identified that its transmission system will experience significant technical issues relating to maintaining a satisfactory operating state resulting from increased connection of intermittent energy sources (predominately from wind generation). The magnitude of the single contingency events (relative to the size of the overall system) and Tasmania's reliance on Basslink tends to increase the technical challenges of integrating new wind generation. Transend has previously highlighted in the AEMO consultation process on NSCAS that AEMO should be actively pursuing mechanisms to managed the technical impacts of low system inertia prior to it impacting on the capability and security of the Tasmanian system. Transend has since identified that other material technical issues are emerging, such as reduced network fault level that may have a direct impact on system security and quality of power supply.

Transend considers the current drafting of the Rules relating to the description of satisfactory operating state (clause 4.2.2) and associated descriptions of technical envelope (clause 4.2.5) and principles of power system security (clause 4.2.6) need to be clarified to include system inertia and fault level scenarios. For example under the existing Rules, clause 4.2.5 does not contemplate inertia as a limitation. If it was recognised as such there would appear to be opportunities to implement specific arrangements to manage its availability, or at least properly quantify its impact on market outcomes. This issue will become increasingly more important as additional intermittent generation is connected to the network.

This submission identifies technical issues relevant to the Tasmanian region and Transend is happy to discuss these transmission system issues further with the AEMC. Transend looks forward to participating in the next stages of the consultation process. If you require further information please contact me on (03) 6274 3909.

Yours sincerely



 Bess Clark
Executive Manager Corporate Strategy and Compliance

² Inertia Issues Working Group, *Final Report*, June 2010.