

Dr John Tamblyn
Chairman
Australian Energy Market Commission
PO Box H166
Australia Square NSW 1215

Dear Dr Tamblyn

e-mail: submissions@aemc.gov.au

TransGrid Submission to AEMC on Draft National Electricity Amendment (Abolition of Snowy Region) Rule 2007 and Concurrent Snowy Boundary Change Proposals

TransGrid would like to thank the AEMC for the opportunity to comment on this important consultation, and has focussed this response primarily on the Snowy Hydro proposal and the AEMC's deliberations to date. TransGrid has taken a neutral position in regard to the separate concurrent Macquarie Generation and Southern Generators proposals in relation to other Snowy regional boundary change proposals. As a result, this response focuses on specific issues raised by the AEMC, including implementation requirements, as follows:

1. Revenue Metering.
2. Location of the region boundary on cutsets, and in relation to Guthega power station and Jindabyne pumping stations.
3. Pricing matters, including the potential impact of reduced inter-regional settlement residue outcomes on NSW transmission prices and co-ordination of pricing across regions.
4. Limit equations and NEMMCO's requirement to manage constraint equations.
5. Load Forecasting.

The attachment to this letter sets out TransGrid's specific response to each of these matters.

In summary, TransGrid does not envisage any material implementation issues as a result of likely changes impacting upon TransGrid. Regarding the location of the region boundary, TransGrid's preference is for locating the boundary at the Murray Switching Station (MSS) end of transmission lines 65 and 66.

I trust the attached comments are of assistance to you. Should you wish to discuss any of these matters further, please feel free to contact me on (02) 9284-3434 or via email: phil.gall@transgrid.com.au

Yours sincerely

Philip Gall 30/4/07
Philip Gall
Manager/Regulatory Affairs

1. Revenue Metering

TransGrid is of the view that there is generally sufficient installed revenue class NEM metering at Guthega, Jindera, Lower Tumut, Murray and Upper Tumut to cater for the proposed Regional Boundary changes, **provided** energy transfers remain **within the Type 2 or 3 metering categories** for which the installations have been registered.

It is anticipated that, as the function of some installations may change, the energy transfers may increase such that the load on some interconnectors will move from Type 2 to Type 1 energy levels, and additional works will then be required to upgrade the metering, in particular to satisfy the full check metering requirements for Type 1 installations. Identification of the affected metering points will be unclear until the regional boundary is determined in detail, and the impacts on flows are known.

This will be the case for either the Snowy Hydro proposal, or the alternative option proffered by Macquarie Generation in recommending their adapted Split Region option.

TransGrid will be pleased to work with the Commission, NEMMCO, and relevant Metering Data Providers at that time, to identify the affected installations and upgrade them as required by the Rules.

The process for upgrading a metering installation to full Type 1 check metering can be lengthy. Remedial works may include HV instrument transformer replacements, additional CT and VT cabling, and the installation of new or replacement metering panels. High Voltage instrument transformer replacements will incur a minimum of 10 to 12 month lead time from the placement of order and should allow for the normal difficulties in obtaining outages on this "congested" part of the network. This process could take up to three years to complete.

TransGrid proposes that the Commission provide a transitional provision in the Rules to allow up to three years for any metering installations to be upgraded as a result of the proposed Rule change to alter the Region boundary. In this way metering arrangements should not impede the timely implementation of the boundary change.

2. Connection Points, location of region boundary cutsets, and Allocation of Guthega to NSW or Victoria

TransGrid seeks to maintain the simplest reasonable approach to transmission pricing changes resulting from the Snowy Hydro Limited proposed Rule change. TransGrid would argue that as far as possible, the AEMC determine the regional boundary so as to minimise the extent of transmission assets which are assigned across the boundary to a different region. So, for example, the location of the region boundary should be at the Murray Switching Station end of lines 65 and 66. TransGrid proposes that should the Snowy region be abolished then the boundary should be established such that only Murray SS is included in Victoria. If there are significant TransGrid transmission assets within the Victorian region then this will add to the complexity in setting transmission prices for no apparent significant benefit.

On the matter of whether Guthega Power Station and the Jindabyne Pumps are allocated to NSW or Victoria, TransGrid notes the following:

- The proposal by Snowy Hydro places the regional boundary in the middle of the busbar at Guthega substation with the Jindabyne Pumps in the Victorian Region and the Guthega Power Station in NSW. The circuit from Murray to Guthega, Mungah and Cooma forms an interconnector but the circuit is normally open between Guthega and Mungah. The suggested location of the region boundary, together with the expected normal operations of the network, would leave a NSW region generator (Guthega) on the Victorian side of the open breaker, that is, isolated from its region. The benefits of this arrangement, in terms of the NEM objective, are not clear.
- If the Snowy Hydro proposal is adopted, TransGrid will need to monitor whether there is a threat to the reliability of the transmission equipment due to changes to the current normal operating arrangements.

In transmission pricing terms, the Snowy Hydro proposal would result in most of TransGrid's assets at Guthega and the lines connecting Guthega to Murray and Geehi, and the line to the Jindabyne pumps being included in the revamped Victorian region. From a pricing perspective it would certainly be simpler to have the region boundary at MSS on the line to Guthega to minimise the extent of TransGrid's assets in Victoria and avoid adding unnecessary complexity to transmission price setting in Victoria (noting the arguments in Section 3 below).

However, TransGrid can accommodate Snowy Hydro's proposals in the event that the AEMC is persuaded that net economic benefits will result.

3. Pricing matters, inter-regional settlement residue outcomes on NSW transmission prices, and co-ordination of pricing

As noted by the AEMC, TransGrid has previously commented that the abolition of this region will eliminate two directional interconnectors for which TransGrid currently receives the proceeds of the inter-regional settlement residue auctions. TransGrid is of the view that it is extremely difficult to predict the overall impact on the Settlement Residue Auction proceeds from the new Victoria to NSW interconnector and the impact on the level of intra-regional residues. In particular, TransGrid notes that the Commission's analysis indicates that the interconnector is expected to be more free-flowing and that prices in NSW and Victoria will tend to converge. This would suggest that there will be a reduction in the settlement residues accumulating across the link from Victoria to NSW. Should there be a significant decrease, the rebate on electricity prices which TransGrid is currently able to apply to transmission prices in NSW will also be significantly reduced. The net result of the Snowy Hydro Ltd Rule change may be a material increase in transmission charges paid by NSW customers. However, on the Commission's analysis, this increase appears to be more than offset for NSW customers by more competitive energy prices.

In this regard, TransGrid appreciates the AEMC's publication of the estimates of total annual inter-regional settlement residues on Snowy Region Directional Interconnectors, derived from the Commission's modelling (*placed on the AEMC website on Friday 2 March 2007*). It is noted that these figures indicate a reduction in residue accumulation particularly in 2009 and 2010.

Transmission pricing across the region boundary

Further to the arguments documented in Section 2 above, it is proposed that TransGrid and VENCORP establish suitable arrangements for the future revenue requirements for Murray SS which may need to be recorded in the Rules.

4. Limit equations and NEMMCO's requirement to manage constraint equations.

TransGrid is of the view that the organisation's limit equations, being technical limits applicable to flows through critical sets of transmission lines internal to NSW, would not require any significant changes to accommodate the potential region boundary change. NSW system security constraints are not anticipated to be impacted, and the present system stability limits in the 'impacted' zone/area can still be validly applied. In making such an assessment it obviates a need to potentially commit to wholesale changes to existing NSW limit equations prior to the implementation of the proposed boundary change. It will be a matter for NEMMCO to undertake any transformations and the appropriate re-orientation of some constraint equations for market reasons to enable the implementation of the proposed boundary change. TransGrid would be pleased to assist NEMMCO where this is appropriate.

5. Load Forecasting

TransGrid is of the view that any modification to the Snowy region will have little, if any impacts, on the current load forecasting practices and requirements of the organisation.