24th March 2006

Dr John Tamblyn, Chairman
Australian Energy Market Commission
1 Margaret Street
Sydney NSW 2000

Snowy Region Boundary and Alternative Snowy Region Boundary

1. Westpac Energy is a registered market trader and financial intermediary in the National Electricity Market registering among the most active market risk management participants in OTC, Futures and SRA derivatives. Within its wider operations, Westpac has significant debt and equity interests in the Australian energy market. The following response represents the views of the Westpac Energy group (Westpac).

2. Westpac does not support either of (i) the Snowy Region Boundary rule change request by Snowy Hydro Ltd; or (ii) the Alternative Snowy Region Boundary rule change request by Macquarie Generation. Neither of these rule change requests adequately address the problems identified and/or introduces new problems for the management of the NEM. Some of the more egregious examples are listed below.

3. Westpac continues to support the request by the group of six generators and NEMMCO (Southern Generators) to make a Rule that would amend the NEMMCO derogation in Part 8 of Chapter 8A (Network Constraint Formulation) to manage negative settlement residues arising from network congestion in the Snowy region. In supporting the Request Westpac notes that the proposal could be implemented in a timely manner, which is of significant advantage to alternative proposals which could take several years. Westpac also notes that it is our belief that uncertainty on flows, constraints, and negative residues has reduced the liquidity over the last two years in the trading of hedges between regions.

4. The rule change request by the group of six generators and NEMMCO which is currently being considered by AEMC (after submissions closed on 10 Feb) in conjunction with the continuance of CSP trial scheme will be positive in encouraging inter-regional trade of risk management products by providing a better risk management product for the market.

5. Additionally, the adoption of the Southern Generators rule change request will allow time for a thorough analysis of the problems identified in the Snowy region, and the subsequent formulation of a comprehensive solution which is built on a foundation of robust economic criteria that will avoid the introduction of new problematical inefficiencies and/or incentives. It is important to note that the MCE has expressed a preference that

> "…..the regional structure for the wholesale market should be stable, based on current boundaries and with robust economic criteria to support incremental change as required."[1]

Snowy Region Boundary rule change request by Snowy Hydro Ltd

6. Appendix C[2] highlights deficiencies in any proposal that are "…narrow in focus and does not consider wider issues" using an example that shows "…the constraints on the 81/82 lines from the western NSW and Hunter Valley group of generators 'western ring generators' places incentives on

[1] Attachment A of http://www.aemc.gov.au/pdfs/reviews/Region%20Boundaries/submissions/000MCE%20Proposal.pdf

[2] Snowy Hydro Ltd rule change request at http://www.aemc.gov.au/pdfs/reviews/Review%20of%20the%20Snowy%20regional%20boundary%20by%20Snowy%20Hydro/submissions/000Snowy%20Hydro%20Proposal.pdf

these generators to bid at very low prices (down to -$1000) and still be immune to their very low local price".

However, the Snowy Region Boundary rule change request by Snowy Hydro Ltd. i.e. Tumut generation allocated to the NSW node, and Murray generation allocated to the Vic node, would create the potential for a similar deficiency.

7. Using the analog of the example provided in Section 3 of the Southern Generators submission[3] to its rule change request, the AEMC should consider if the Snowy Hydro Ltd. rule change request itself creates constraints on the 81/82 or 8/16 lines that would create the incentive for the Tumut generator capacity to be offered at very low prices (for the same reason that Section 3 says that Murray often offers capacity at $0.04) and yet be immune to the (inferred) shadow price at the Tumut node.

8. Assume that the Murray-Tumut limit is 1350MW (the future Victoria to NSW interconnector in the Snowy Hydro Ltd. proposal), the 8/16 line limit is 3000MW (NSW intra-regional constraint in the Snowy Hydro Ltd. proposal) and the Dederang - Murray limit is 1900MW (Vic intra-regional constraint in the Snowy Hydro Ltd. proposal). If Tumut offers 2200MW at $0.04[4] there will only be an 800MW northward flow on the 65/66 lines (the future Victoria to NSW interconnector), i.e. only 60% capacity utilisation of a notional 1350MW inter-regional interconnect. It is clear that the Snowy Hydro Ltd. proposal will not reduce Snowy's ability to act as a gate keeper and in fact will more than likely increase it. Hence it clearly does not automatically hold that:

> "If Tumut generation and "western ring" generations are on same footing, that is, they are both paid the NSW regional reference price (or in the future a western/south-west NSW node), then as a result there would no difference in pricing for Murray and Victorian generators. That is, no counter price flow from Victoria to Snowy would exist." [5]

9. It is clear that the Victorian generators will be as disadvantaged by the Snowy Hydro Ltd. proposal as they would be under the current scheme since the Victorian generators can still be shut out of the NSW market even though the flow is not counter-price. Counter-price flow is merely a more extreme instance of the same issue, where a gate keeping generator in the receiving region reduces the capacity on the importing interconnector to such a level where the limit actually forces the interconnector to export simply to "use up" the excess generation.

10. The main issue raised in the Snowy proposal is the unfair advantage "western ring generators" have over Tumut generation under certain congestion conditions. This is a valid concern; however the CSP scheme has already been demonstrated to restore the correct price at the Tumut node. It would make more sense to extend the CSP scheme to encompass the "western ring generators" where the issue has been identified rather than undoing an effective fix in the interests of levelling the playing field for this specific issue at the risk of tilting the field in another area. As long as the residue that is generated (once the CSP adjustments have been made) is distributed to unit holders in some fair manner, the spot dispatch will be efficient and fair and the ability to value and hedge congestion will be enhanced.

11. The Snowy Hydro Ltd. proposal expresses a concern that inefficient network investment would be incentivised to occur[6].

> Inefficient network investment: As a consequence of this regional structure and the incentives placed on Tumut generation ... Tumut plant is incentivised to limit generation availability such that a transmission constraint on the Snowy to NSW interconnector rarely occurs. In our view this may create a perverse incentive for a transmission service provider (in this case Transgrid) to try and increase supply from

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[3] Page 4 of http://www.aemc.gov.au/pdfs/reviews/Management%20of%20negative%20settlement%20residues%20in%20the%20Snowy%20Region/submissions/007Southern%20Generators.pdf

[4] Analog of Section 3 example of the Southern Generators submission for its own rule change proposal.
[5] Snowy Hydro Ltd rule change request *ibid.*
[6] Appendix B of Snowy Hydro Ltd rule change request *ibid.*

> North NSW by proposing to upgrade the Liddell to Marulan 500kV ring to allow more power flow from Liddell/QNI to balance the Marulan/Dapto constraint. This investment is simply not needed if Tumut generation receives appropriate incentives and put in exactly the same competitive position as other NSW generators. That is, given the correct region definition, Tumut generation has sufficient surplus generation capacity to push more energy through the 8/16 lines and thereby balance the 81/82 constrained line

The AEMC may wish to seek the TNSP's (Transgrid) view on this concern. Transgrid's 2005 APR[7] shows that the Liddell-Marulan 500kV ring upgrade also improves voltage control capability. It is not apparently obvious that evidence exists that pushing more energy through 8/16 lines from Tumut could provide the same voltage control capability. Further, successful offset of 81/82 constrained lines by Tumut requires an assumption that Tumut generation could consistently provide a more competitive offer compared to Hunter Valley (Bayswater & Liddell) and QLD generators (via QNI).

12. The Snowy Hydro Ltd. proposal expresses a concern that inefficient generation investment would be incentivised to occur[8].

> Inefficient generation investment: ...500kV transmission upgrade option may provide a perverse opportunity for an investor to build new generation in the Marulan area...a new generator may become financially viable since it would receive deferral benefits of delaying the proposed new transmission upgrade. However this new generator would not provide any additional energy (MWs) to the Sydney load area...

The AEMC may wish to seek the TNSP's (Transgrid) view on this concern. Transgrid's 2005 APR[9] shows that the only generation development that could bring the same benefit as the 500kV network upgrades is in Newcastle/Central Coast area. From this statement of Transgrid, it appears unlikely that a new generator in Marulan would receive deferral benefits.

Alternative Snowy Region Boundary rule change request by Macquarie Generation

13. The alternative Macquarie Generation proposal advances as an advantage that it will improve dispatch incentives[10] including

> "the revised structure would minimise loop flows in and around the Snowy network"

It is important that to recognise that the suggested topology is not strictly radial, and thus loop flows can still occur. It is not 100% certain that the proposal will eliminate negative residues nor even reduce its frequency. In addition since load (generally) cannot respond to price signals in the dispatch timeframe, it is much more important that the regional reference node be located close to the Murray and Tumut generation. The issues that occur when the regional reference nodes are not have been well demonstrated and are the sole reason why the CSP scheme was introduced in the first place.

14. The Alternative Snowy Region Boundary rule change request by Macquarie Generation proposal also introduces a regional loop viz. the Murraylink DC interconnector has been included in the Northern Victoria (NV) region. Hence there will be a loop introduced between SA, Vic and NV. Loops do not themselves create inefficient dispatch outcomes, but the SRA instrument does not work on a meshed network. This in itself is not a reason to avoid loops, however if loops are introduced, then a

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[7] page 48
[8] Appendix B of Snowy Hydro Ltd rule change request *ibid*
[9] page 46
[10] Page 6 of http://www.aemc.gov.au/pdfs/reviews/Snowy%20region%20boundary%20-%20Macquarie%20Generation%20Proposal/submissions/000Rule%20Proposal.pdf

new residue product must be introduced at the same time. Failure to do so will further reduce the ability for inter-regional trade.

> "…..the appearance of negative settlement residues …..is merely a sign that the approach to dividing the merchandising surplus into separate payment streams is inappropriate. In this case, the appropriate policy response to the appearance of negative settlement residues merely amounts to "shifting funds around" from one stream of payments to another – no change to dispatch is necessary nor desirable…."[11]

15. To summarise, both of the proposed Snowy Region Boundary rule changes (i) do not adequately address the problems identified, (ii) introduces new problems for the management of the NEM, and (iii) suffer from significant implementation delays.

The Southern Generators rule change request to manage negative residues in the Snowy Region coupled with the continuation of the CSP\CSC scheme is a much more effective and pragmatic solution to the wider issue.

We welcome the opportunity to meet and discuss our submission in more detail. Feel free to contact me at (02) 8254 9130.

Regards

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[11] Pg 4, Dr D. Biggar, "Management of Negative Residues on the VIC-Snowy and Snowy to NSW Directional Interconnectors", 20 May 2005. http://www.nemmco.com.au/dispatchandpricing/179-0241.pdf