11th April 2006

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

Letter sent electronically to: submissions@aemc.gov.au

Dear John

Consultation: Congestion Management Review (Issues Paper)

Snowy Hydro Limited (Snowy Hydro) understands that the MCE has requested this review to address three key areas:

1. Identify and develop improve arrangements for managing financial and physical trading risks associated with material network congestion;

2. The review should take account of the relationship between a constraint management regime, constraint formulation, regional boundary review criteria, ANTs, Last Resort Planning, the Regulatory Test, and TNSP incentive arrangements; and

3. The constraint management regime should manage material and enduring constraint issues until it is addressed through investment or regional boundary change.

The MCE congestion management framework is aimed at maintaining stable region boundaries, with a rejection of full nodal pricing.

For the MCE approach to be effective two key issues need to be addressed. Firstly, the AEMC needs to implement a congestion management regime for significant and non-permanent congestion. Secondly, a pre-requisite before entering the new congestion management framework is the need to address and fix known significant congestion problems.

Constraint Management for Significant but Non-Permanent Constraints

If the MCE Region Boundary change process is to be adopted then it is imperative that some form of constraint management for significant but non-permanent constraints is adopted. We propose that the CSP/CSC regime (similar to the CRA proposal) provides such a mechanism. This mechanism has been applied to the intra-regional constraint between Murray and Tumut and has been shown to be effective in encouraging generation competition.

For the MCE congestion management policy framework to be adopted it is imperative that the AEMC facilitate an industry agreed CSC allocation methodology. Snowy Hydro has a view as to how these transmission property rights can be distributed in an efficient manner and we will provide more details when the AEMC initiates a specific consultation that examines options for allocation.

Please note that a congestion management regime exist in today's market (in fact a market cannot operate without one) but the current arrangement is technically orientated and there is only implied property rights, and further relies on NEMMCO's uncertain intervention.

Addressing Known and Material Congestion Locations

The AEMC has the opportunity to facilitate market changes that would correct existing inefficiencies in the current regional market design. All market Participants have recognised and acknowledged the market inefficiencies arising from an ill-defined Snowy Region. For example, there are currently two obviously inefficient investment proposals that have been simply driven by the inappropriate region boundary definitions.

These are:

- the proposed Wagga gas generation plant (that will not add any single MW of additional supply to NSW demand (see page 99 of Transgrid's NSW Annual Planning Report 2005) and simply substitute existing Tumut generation plant in the same physical transmission location but artificially defined to a different market region.

- The proposed Transgrid 500kV "ring upgrade" that provides the same or less benefit (MWs supply) to the greater Sydney load region at significantly higher capital cost in comparison to an upgrade of the Tumut to NSW lines at far lower capital cost. Due to the inappropriate regional boundary definition Transgrid is not in the position to recognise or assess the latter alternative. With an appropriate Region definition Transgid would have a sound business case to develop critically needed and high capital cost new transmission capability from the "western ring" into the greater Sydney load area to meet future needs of end users.

We believe an appropriate change of the Snowy regional boundaries would result in:

- A number of related Rule change proposals becoming void (LYMMCO and Mac Gen proposals);
- Increase generation competition;
- Increase Snowy1 interconnector flow to NSW;
- Improved inter-regional trade;
- Avoid inefficient new investment as highlighted above;
- Is consistent with MCE policy of stable regions, and meets the trigger requirements for a Region boundary change as set out by CRA; and
- Ultimately results in significant net benefits to consumers.

We recommend that the new Snowy boundary definition applies from the 1 July 2007. Following this initial step there would be a sound basis from which to begin the MCE proposed congestion management regime and the new regional boundary change rules. For further justification and analysis that quantitatively supports our Snowy Region Rule change please refer to our submissions on this issue.

Answers to AEMC Questions in the Issues Paper

Snowy Hydro has already provided detailed analysis on some of the questions discussed in the Issues Paper. Rather than repeat these views, we have instead provided brief comments to some of these questions. For a more detailed explanation of our views, please refer to Snowy Hydro's submission to:

- Snowy Hydro's Snowy Region boundary proposal;
- Snowy Hydro's submission to the Southern Generators (LYMMCO's) Rule change proposal to manage negative settlement residues in the Snowy Region.

Snowy Hydro can be contracted to elaborate or clarify any of the views submitted to these and other inter-related submissions.

Comments to Specific Questions in the Issue Paper

1. Do existing constraints have a material effect on the efficiency of the NEM? What is the nature and materiality of these constraints? Why is it that these constraints have not been addressed to date? Are there specific points of congestion that should be addressed in advance of the establishment of a new congestion management regime?

Yes, there is a very material effect on the efficiency of the NEM (see the introduction to this response).

The major reasons that these constraints have not been addressed is the "moratorium" on regional boundary changes. Prior to the 'formal' moratorium, there was a number of recommendations to make changes that were not acted upon.

We believe existing intra-regional constraints between Murray and Tumut does have a material effect on the efficiency of the NEM especially where there exists inappropriate region boundaries. We believe that these points of congestion must be addressed in advance of the establishment of a new staged congestion management regime.

Hence, we recommend that the AEMC implement the Snowy Hydro Rule change proposal prior to the implementation of the MCE congestion management regime.

2. Given the development of the NEM and the recommendations of reviews undertaken to date, what are the significant priority issues for this Review?

The priority issues for the Review are:

1. Fix the current problem with the Snowy Region.

   This is crucial to removing uncertainty on how constraints in the Snowy Region will be managed and will lead to a sound starting point for implementation of the MCE's staged constraint management regime.

2. The AEMC must develop a congestion management regime to deal with persistent and non permanent constraints.

   Central elements of this regime would be the development of a transmission access right

(CSC) and the development of trigger levels for each stage of the congestion management regime.

3. What are the key questions the Commission should seek to examine quantitatively as part of the Review? What key factors should the Commission take into account in this modelling analysis?

The Snowy Hydro's regional boundary submission contains quantitative evidence of the effect of the current ill-defined Snowy Region boundary. The current investment proposals (Wagga Gas Turbine and Transgrid 500kV ring upgrade) highlighted in the introduction to this submission also demonstrates the inefficiencies of the current arrangements.

It is important that in any quantitative analysis that the AEMC should not be solely reliant on actual market outcomes as the current Snowy Region boundary for example conceals more efficient behaviours that would apply under a correct region boundary definition. Hence consideration must be given to what are the commercial incentives under the new regime in comparison to the old (as Participants by definition will respond to market incentives produced by the new regime).

4. Are there any material problems with the 'option 4' approach to constraint formulation to managing system security and reliability? How might such problems be addressed while continuing to maintain system security and reliability?

Option 4 approach is clearly the most efficient possible. Option 4 requires a CSP/CSC regime to ensure competitive neutrality between inter and intra regional generators.

6. How material are reductions in the dispatch and pricing efficiencies due to binding intraregional constraints under the current arrangements? How can they be quantified?

Very material at a number of diverse locations. For the Snowy Region constraints, we have quantified part of the inefficiencies – refer to Snowy Hydro's submissions to our Snowy Region Rule change proposal.

As highlighted earlier, it is important that in any quantitative analysis that the AEMC should not be solely reliant on actual market outcomes as the current Snowy Region boundary conceals more efficient behaviours that would apply under a correct region boundary definition. Hence consideration must be given to what are the commercial incentives under the new regime in comparison to the old regime (as Participants by definition will respond to market incentives produced by the new regime).

7. How material are the reductions in dispatch and pricing efficiencies due to the management of negative settlements residues under the current arrangements? How can they be quantified?

Very material at a number of diverse locations.

As highlighted in a number or previous sections, it is important that in any quantitative analysis that the AEMC should not be solely reliant on actual market outcomes as the current Snowy Region boundary conceals more efficient behaviours that would apply under a correct region boundary definition. Hence consideration must be given to what are the commercial incentives under the new regime in comparison to the old region.

8. Have the existing arrangements resulted in materially inefficient investments? Could the existing arrangements result in materially inefficient investments in the future? What kind of inefficiencies may result?

In the introduction Snowy Hydro demonstrated a number of potentially very inefficient investments.

9. How well do existing arrangements provide signals for efficient investment over time and locationally using the least-cost technology—generation, network demand side management or non-electricity alternatives?

Current arrangements are clearly ineffective.

Fixing the Snowy Region, setting a congestion management regime (including property rights) and new long term regional boundary change rules will provide a more efficient framework.

11. Do market Participants face problems in managing risk due to the nature of the instruments available, or the liquidity of market for those instruments? If so, how are those problems related to the current approach to congestion management?

Yes – but it is fundamentally related to the current inappropriate regional boundaries and the framework of managing congestion.

12. Are there problems in accessing information to support effective risk management in the context of congestion in the NEM? Is the lack of exchange based trading a problem in this context?

No. Refer to Question 11.

13. Does the current design of IRSR units impact the ability of participants to efficiently manage inter-regional price risk?

SRAs are partially effective risk management tools. There effectiveness is impeded by inappropriate region boundaries. The level of firmness due to transmission risk is a known risk. However, this risk is manageable as Participants can discount the level of firmness in their risk management processes. Transmission firmness can be improved with appropriate performance incentives for TNSPs.

14. Has the uncertainty regarding regulatory process and decisions created material risks for participants?

Yes – very materially.

The boundary change moratorium has prolonged existing congestion problems in the Snowy Region. With growing demand, tidal flows through the Snowy Region will only increase in magnitude and make it more difficult for NEMMCO to manage system operations. What is needed is the implementation of a permanent solution.

15. Do market participants face problems in managing risk due to a lack of transparency associated with the current approach to congestion management? If so, what are the nature and materiality of these problems?

Yes – The key issue is uncertainty of different incentives on Participants as well as the significant uncertainty of NEMMCO's intervention process.

18. Is the proposed 'staged approach' to congestion management an appropriate framework? Is it the most effective response to those problems? Is it technically and commercially feasible?

The MCE (CRA) staged approach for congestion management is fine so long as existing problems in the Snowy Region are fixed.

The MCE approach would also be very reliant on a constraint management mechanism (such as CSP/CSC) to deal with significant but non-permanent constraints.

With the fixing of the Snowy Region problem, the MCE proposed approach with a constraint management regime for significant but non permanent constraints offers stability, transparency, and certainty to manage constraints.

20. Are the costs of an interim congestion regime (discussed in greater detail below) clearly lower than the costs associated with region boundary change?

It's not clear whether costs are lower in all cases. What is clear is a congestion management mechanism like the CSP/CSC can be easier to dismantle if the relevant constraint fades. This would be less disruptive than a region change and hence should result in lower costs.

21. What triggers should be considered for the introduction of various congestion management tools under a staged approach? Which institutions should be responsible for recommending and approving the introduction of congestion management tools at each stage?

As explained in the introduction, a congestion management regime must exist in any effective market arrangement. Triggers are almost irrelevant as there is little cost to implement congestion management if the framework is set correctly. For significant but non-persistent constraints, any future occurrence of constraint will automatically trigger the CSP/CSC. If it never constrains (and thus not triggered) there is no impact.

22. What role should region boundary changes play in managing congestion, particularly in a staged response? How much emphasis should be placed on that role?

Region boundaries are the most transparent means of signalling major and persistent congestion pinch-points. A boundary change would be a more permanent change than other constraint management tools and hence it is reasonable to expect that there is likely to be large efficiency benefits before going down this path.

23. Is the economic boundary change criterion proposed in the MCE region boundary Rule change proposal consistent with the staged approach to congestion management? What further efficiency gains would be realised from region boundary change, after the introduction of an interim congestion management tool?

Yes, it is consistent.

Ultimately the additional efficiency benefits of a new market Region is provided to end use customers located within that Region, provided there is significant level of demand relative to generation supply sources.

24. To what extent will firming-up IRSRs facilitate inter-regional trade? What is the best approach to firming up IRSRs and how would this work?

IRSRs will increase in firmness by appropriate region boundary definitions, an appropriate congestion management regime and appropriate incentives on TNSPS.

25. Is there a need to review the case for the 'option 4' constraint formulation approach in the context of this Review? If so, what would be advantages and disadvantages of moving away from an 'option 4' approach to constraint formulation?

There is no need and no valid justification to change from Option 4 constraint formulations. Option 4 constraint formulations would be further improved and be more effective with the correction of Region boundaries.

26. What would be the effect of ceasing NEMMCO intervention to manage counter price flows? To what degree does this depend on other factors such as the region boundary criteria and process?

If NEMMCO ceases to intervene and manage negative residues in the Snowy Region this would result in serious competitive neutrality issues between inter and intra-regional generators and create major disbenefits for customers as highlighted in our submissions to the Southern Generator's (LYMMCO) Rule proposal.

Additionally, if NEMMCO ceases intervention to manage counter price flows, negative settlement residues would occur. This reduces the effectiveness of inter-regional risk management tools (ie. SRAs) and hence reduces end user benefits. The need to cease NEMMCO intervention depends to a very large extent on the regional boundary change process and the associated congestion management regime.

34. Is the allocation of CSCs a necessary element of a CSP/CSC regime, or would it be practical to introduce CSPs without simultaneously allocating CSCs?

The CSP/CSC regime needs to be implemented together to remove having basis risk by just having a CSP. The AEMC is encouraged to facilitate industry discussion on an agreed CSC allocation methodology.

35. If CSCs are a necessary component, what is the optimal way to allocate CSCs? What effect will this have on the ability to introduce CSPs rapidly and flexibly?

Snowy Hydro believes the CSC allocation would be a contentious issue for the AEMC to resolve. However, it is an issue that must be resolved in order for the congestion management regime to function effectively. We have a specific proposal that we intend to submit to the AEMC during the explicit consultation on this issue.

CSCs (together with CSPs) can be deployed rapidly once appropriate allocation methodologies are finalised.

36. Is it important to the design of a congestion management regime whether or not CSCs are firm? If so, what issues should the AEMC consider in reaching a view on the appropriate nature of CSCs?

The key issue with firm CSCs is who bears the risk of underwriting the firmness?

We believe CSCs should be allocated based on the access to a percentage (%) of the transmission element . Hence these CSCs would still be non-firm similar to IRSRs.

37. How should the process of region boundary change be coordinated with the allocation of CSCs under a staged approach to congestion management?

So long as the Region change process is transparent, Participants would be able to mitigate the risk associated with CSCs coming void after a region change. Please note existing major problems with the Snowy Region boundary needs to be corrected before any such regime applies.

38. How can the Commission best draw on the partial Snowy CSP/CSC trial to evaluate the costs and benefits of the use of CSP/CSCs? How can the Commission best draw on the Snowy CSP/CSC trial to consider modifications to the proposed design of CSPs and CSCs?

NEMMCO has stated that the Tumut CSP/CSC has functioned in accordance with its design objectives[1], "allowing Tumut to compete with other NSW generators".

Snowy Hydro re-empathises that the CSP/CSC deals with the intra-regional constraint between Murray and Tumut. The Snowy Hydro Snowy Region change proposal will deliver additional net benefits due to an increase in interconnector flow, improved competition, and improved inter-regional trade.

Snowy Hydro is happy to work further with the AEMC to draw on this experience.

39. Are there any additional congestion management tools that should be considered as part of this Review? How would these tools be implemented? How would they interact with

[1] NEMMCO, CSP/CSC Trial, presentation to PAC, page 10.

other aspects of the congestion management regime? What would be the effect of such tools on participant behaviour and market outcomes?

Snowy Hydro believes that CSP/CSC is the most appropriate tool (and is the outworkings of significant and multi year consultations and industry debate). We are open however to any new and demonstrably effective proposals.

In addition we suggest if Participants pay for new transmission access, then the congestion management regime should allocate them this property right for a specific period.

40. Which, if any, of the congestion management issues identified in this paper could be considered on a stand-alone basis? Which issues need to be considered together to ensure a comprehensive and consistent congestion management regime?

All congestion management issues discussed in this paper should be assessed from a holistic perspective. That is:

- Recognise the distorted commercial incentives within the current incorrect Snowy Region structure;
- Correct known and existing problems;
- Implement a congestion management regime for significant but non permanent constraints;
    - Implement CSC allocation methodology.
- Develop each stage of the constraint management framework.

Conclusion

Central to the MCE proposed policy changes is a staged congestion management framework. This framework needs for it to be effective, a mechanism like the CSP/CSC to deal with significant but not persistent constraints. This mechanism requires a methodology to allocate transmission property rights (CSCs) and we encourage the AEMC to facilitate industry debate to derive an allocation methodology.

The problems in the Snowy Region are significant, material, affect inter-regional trade, and blurs investment signals. It is necessary and the AEMC has the opportunity to fix these problems by facilitating a permanent solution. Once resolved there would be a sound basis from which to begin the MCE proposed congestion management and new regional boundary change regime.

Snowy Hydro appreciates the opportunity to comment on this review. To discuss this submission further, I can be contacted on (02) 9278 1885.

Yours sincerely,

Roger Whitby
Executive Officer, Trading