MAJOR ELECTRICITY USERS' GROUP

14 July 2011

Dr Graham Scott
TPAG Chair
C/- Electricity Authority
By email to submissions@ea.govt.nz

Dear Dr Scott

TPAG Transmission Pricing Discussion Paper

1. This is a submission by the Major Electricity Users' Group (MEUG) on the Transmission pricing Advisory Group (TPAG) "Transmission pricing discussion paper" of 7th June 2011[1]. Attached and to be read as part of this submission is an independent report by NZIER "Transmission Pricing Advisory – A Review of the TPAG HVDC pricing discussion paper – 7 June 2011" dated 14th July 2011 (the "NZIER report").

2. MEUG members have been consulted in the preparation of this submission. Given the importance of this matter several MEUG members are also making submissions.

3. Abbreviations used in this submission are consistent with the glossary of abbreviations and terms in the consultation paper. This submission is not confidential.

4. This submission has three sections. First, a summary of MEUG's response is set out in the next paragraph. Next, responses to the questions in the consultation paper are set out in the table in paragraph 6. And last, caveats on this submission in relation to TPAG and this consultation process are covered in paragraphs 7 and 8.

5. Briefly MEUG:

   a) Disagrees with the recommendation of the majority of TPAG members to change the TPM for the HVDC from the status quo to a postage stamp transition. The analysis by NZIER notes the alleged inefficiencies have either been overstated or are not in fact inefficiencies. Furthermore not all feasible options were adequately considered and the claimed benefits of alternatives that have been considered are not robust.

      In the absence of unambiguous evidence consumers will receive long-term benefits; a change in the TPM for the HVDC as proposed by a majority of TPAG members will

[1] Refer http://www.ea.govt.nz/our-work/consultations/advisory-group/transmission-pricing/

reduce the wealth of all consumers and undermine their confidence in the robustness and stability of the regulatory regime.

b) Is disappointed by the lack of analysis beyond the work already undertaken by the EC in relation to the TPM for HVAC assets. This has been an opportunity squandered.

c) Has no view on the options for static reactive compensation. Individual MEUG members have advised they will be commenting on the proposals.

d) Will wish to discuss directly with the EA Board various matters regarding the TPAG process in the very near future.

6. Responses to the questions in the consultation paper follow:

Question		MEUG response
Q1.	Do you agree with the TPAG's assessment that there does not appear to be a demonstrable economic benefit from enhanced locational signalling to grid users through transmission charges to defer economic transmission investments decision? If not, please provide your reasons.	The work by TPAG and the EC beforehand indicates a possible small benefit for enhanced locational signals for economic HVAC investments; albeit using models that by necessity are not fully stochastic and care needs to be taken in interpreting and relying on the results. It could be either a "but-for" or deeper connection approach might realise most of the benefits identified. For future major refurbishment or new capital for HVDC assets, such as an additional submarine cable and filters[2], a locational pricing signal (eg capacity rights) would be welfare enhancing.
Q2.	Do you agree with the TPAG's assessment that the changes to the statutory framework during the course of the transmission pricing review project do not require the Commission's analysis and development of alternative TPMs to be reworked?	Agree TPAG has undertaken its work with the intention of aligning with the revised Code. Do not agree TPAG has been successful in achieving outcomes consistent with the Authority's statutory purpose.
Q3.	Do you agree with the TPAG's assessment that the options developed through stages 1 and 2 of the Review were developed in a manner consistent with the Authority's statutory objective?	See response to Q2 above.
Q4.	The TPAG efficiency considerations: Has the TPAG identified appropriate efficiency considerations to assess the costs and benefits of different options?	These look reasonable with one exception. That is none of the considerations cover the point that benefits need to unambiguously accrue to consumers to achieve the

[2]The additional submarine cable and filters are mentioned in the TPAG discussion paper in paragraph 6.4.27 and footnotes 55, 143 and 145

Question		MEUG response
	If not what other efficiency considerations would be appropriate?	statutory objective of improving the long-term benefit of consumers.
Q5.	Do you agree there was sufficient evidence of a clearly identified opportunity for an efficiency gain to warrant analysis of alternative options for the allocation of HVDC costs? In particularly do you agree with the assumptions and analysis contained in section 6.2 and further elaborated in Appendix D? If you do not agree please set out your reasons for reaching an alternative conclusion.	**No[3]. A more appropriate expected NPV cost appears to be $8m rather than 'up to $96m'**. Given limitations in the analysis we believe there is insufficient certainty to determine if $8m is material relative to the large scale of generation investment in the pipeline and the limitations with the model TPAG uses. The Authority's CAP 2 principle of a 'clearly identified market or regulatory failure' is not met. **The case for change is weak on economic efficiency grounds**. The assumptions and analysis contained in section 6.2 and Appendix D are inappropriate because TPAG assumed that the minimum effective investment hurdle for all generators is $35/kW/yr. However, section 3.1.2 in NZIER's review explains that a more appropriate assumption is that any project that is more than $13/kW/yr cheaper than NI generation is expected to be undertaken. Applying the assumption (including HVDC rentals): • **reduces the estimated inefficiency of suppressed baseload generation by 74%–84%**, from $14m–$64m to $2m–$13m. The expected economic inefficiency is $6m (81% reduction), rather than $31m (refer to section 3.2 in NZIER's review) • **reduces the estimated inefficiency of suppressed peaking generation by up to 93%**, from a maximum of $37m to $2.6m (with HVDC rentals), or $1.2m, $2.0m and $2.6m for 5, 10 and 15 yrs NI generation deferral respectively. The median cost estimate is $2.0m (87% reduction) (refer to section 3.3.3b) in the NZIER review). **The estimated inefficiency of $10m from withholding existing peaking capacity is eliminated** because TPAG (D.9.5) say that all of the existing SI peaking capacity should be economic to offer once pole 3 is

[3] Refer NZIER report, section 1.3, Response to questions, Q5, page v

Question	MEUG response
	commissioned, even if HAMI HVDC charges remain, and thus there is no problem over the course of the appraisal period. (Refer to section 3.3.3a) in the NZIER report). **The anticompetitive effects from advantaging Meridian are probably less likely than implied**. Any competitive advantage over only relates to investment and to projects that are between \$13–\$35/kW/yr cheaper than NI projects. This gap relates to a tiny amount of potential investment. (Refer to section 3.1 in NZIER's review).
Q6. Do you agree with the range of HVDC options identified for assessment? If not, why not?	The 'Incentive free allocation to SI generators' is not given the same standard of treatment as the other options[4]. Unlike the other options it is not given due investigation and explanation in TPAG section 6.3, and it was omitted from TPAG Table 27 on the grounds it was 'unworkable' without any justification or explanation. (Refer to section 4.2 in NZIER's review.)
Q7. The TPAG has assessed the HVDC options against the efficiency considerations 1 - 6. Are there aspects of this assessment that you disagree with and/or could provide further information on? Please provide details	Yes[5]. The gross benefits of alternatives to the HAMI charge are not expected to exceed \$8m in present value rather than 'up to \$98m'. A possible exception is for the 'capacity rights' option because it may support higher quality investment decisions on the HVDC link in the future. (Refer to section 3.4 in NZIER's review.)
Q8. What is your position on the two views? Do you have further evidence to support either the majority or minority view?	The 'minority view' is more appropriate[6]. The gross benefits of moving to a distortion-free allocation is expected to be \$8m in present value rather than 'up to \$98m'. In light of the concerns with the relatively simple modelling (e.g. refer to section 3.2.3 c) in NZIER's review), an NPV cost of \$8m does not look to be a clearly identified problem with the Code — the demonstration required by the Authority's CAP 2 principle. The case for change is weak on economic efficiency grounds. (Refer to section 3.4 in NZIER's review.)

[4] Refer NZIER report, section 1.3, Response to questions, Q6, page vi
[5] Refer NZIER report, section 1.3, Response to questions, Q7, page vi
[6] Refer NZIER report, section 1.3, Response to questions, Q8, page vi

Question		MEUG response
Q9.	Do you agree with the summary of the comparison of alternative options and the majority conclusion that leads to the identification of the postage stamp transition option as the preferred option? If not, please give reasons why.	No[7]. Reasons why: • the 'incentive-free allocation to SI generators' was excluded from the TPAG Table 27 summary comparison of options without an appropriate justification (refer to section 4.2 in NZIER's review) • we estimate that the net benefits of the options are more likely to be up to $8m (depending on the option), rather than the $98m reported by TPAG. It is also inappropriate to sum the upper bounds — refer to section 3.4 in the NZIER review. • the preferred option on pure economic efficiency grounds is the 'incentive-free allocation to SI generators', which scores the same or better on every attribute considered (refer to section 4.4 in NZIER's review).
Q10.	The TPAG's analysis assesses postage stamping the HVDC costs to offtake customers. In Table 17, the impact on the analysis of different postage stamp variants was considered. Do you think there are other variants of the postage stamp options that should be explored further? Please give reasons	No[8]. There is no case yet established to further consider postage stamp options.
Q11.	If a transition to postage stamp option were recommended to the Authority and progressed further, do you agreed with the majority view that the $30/kW initial charge to existing grid-connected SI generators and 10 year transition period is appropriate? If not, please give reasons. Are there other issues with the transition to postage stamp options that should be considered? Please provide details	No[9]. There is no case yet established to further consider postage stamp options. We recommend the EA further investigate variations to an incentive free approach or capacity rights approach.
Q12.	Do you agree with the TPAG's conclusion that any further analysis of deeper connection options requires	TPAG have assumed it is necessary to have coordination between regulators before the EA undertakes further analysis. We believe

[7] Refer NZIER report, section 1.3, Response to questions, Q9, page vii
[8] Refer NZIER report, section 1.3, Response to questions, Q10, page vii
[9] Refer NZIER report, section 1.3, Response to questions, Q11, page vii

Question		MEUG response
	close coordination with the Commerce Commission?	coordination is desirable but not necessary. Both regulators have their own statutory objectives, various statutory deadlines they must achieve (eg Commerce Commission has statutory deadlines with respect to Transpower capital expenditure Input Methodology) and a MOU agreed on managing boundary issues. Both regulators should work to meet their own statutory requirements first, with opportunities for coordination taken as they arise. We therefore do not accept TPAG's excuse that coordination is necessary and instead are disappointed a more thorough analysis beyond that already undertaken by the EC was not made.
Q13.	The TPAG has made a broad estimate of the possible efficiency gains from deeper allocation of costs to specific participants of $15 to $40m NPV. What do you think is the likelihood that such efficiency gains might be possible? Please give reasons.	The likelihood should be assessed empirically. TPAG should have done this.
Q14.	Do you agree with the range of options for deeper or shallower connection, or for deeper allocation of interconnection costs, that have been identified? If not, why not?	TPAG's superficial assessment of the deeper connection and 'but-for' options (refer Q13) gives us no confidence the full range of feasible options has been considered.
Q15.	The TPAG has assessed the 'but-for', flow trace and shallow connection options against the efficiency considerations 1 - 6. Are there aspects of this assessment that you disagree with or could provide more information on? Please provide details.	Same response as that to Q14 above.
Q16.	Do you think there is justification for the Authority to progress further analysis of connection options or a deeper allocation of costs to specific customers? If so, please give reasons.	The TPAG work has not advanced thinking on the HVAC TPM much compared to work by the EC. The excuse that coordination with the Commerce Commission is needed and therefore a more robust analysis can be put on hold is a poor excuse. The Authority cannot rely on the TPAG analysis and therefore will be required to undertake further work to assess the validity of the estimated $15m to $40m NPV benefit ahead of deciding if there is an opportunity of coordinating with the Commerce Commission.

Question	MEUG response
Q17. Do you agree with the TPAG's overview of the background on SRC and the identification of the regulatory failure described in this section? If not, why not? Q18. Do you agree with the selection of SRC options selected for assessment? If not, why not? Q19. For option 4, the amended kvar charge, do you support the approach of retaining a minimum point of service power factor for the UNI and USI regions as a backstop measure? If so, do you support the recommended approach of providing a penalty rate for demand in excess of the minimum? Q20. The TPAG has assessed the amended status quo and the amended kvar charge options against the efficiency considerations 1 - 6. Are there aspects of this assessment that you disagree with or could provide more information on? Please provide details. Q21. Do you agree with the TPAG's summary of the costs and benefits of the options assessed and its observations? If not, why not? Q22. Do you think it appropriate that minimum power factor requirements are retained in the Connection Code for points of service in the LSI and LNI regions, when a view has been taken that such arrangements are unenforceable in the UNI and USI regions and thereby amount to a regulatory failure? Q23. In your experience are there any other issues that arise from the current prescription within the Connection Code of minimum power factor for points of service in the LSI or LNI regions? Please provide background relevant to any issues you identify. Q24. If you have identified issues in the previous question, do you think an approach similar to the amended kvar charge option, possibly incorporating a	No comment on Q17 to Q25 regarding SRC.

Question	MEUG response
penalty charge for reactive power demand in excess of a set minimum power factor, would provide a better approach to address the issues you have identified? Are there other options that should be considered? Q25. Do you support the recommended introduction of an amended kvar charge (option 4) into the TPM? Please provide reasons.	
Q26. Bearing in mind the indicative Draft Guidelines are intended to reflect the TPAG conclusions set out in this Discussion Paper, do you have any alternative drafting suggestions?	No. MEUG submits that because the proposed changes by the majority of TPAG members to the HVDC TPM fail to have economic merit and TPAG has failed to adequately consider the HVAC TPM, then the proposed Draft Guidelines are superfluous.

7. The responses above to the questions in the consultation paper are subject to the following caveats. These are not in any order other than as they have arisen chronologically:

   a) MEUG has concerns with how TPAG was formed and its relationship to the Authority including consistency with the Authority's own Charter documents for advisory groups. We are also considering how the members and advisors to TPAG were selected and whether an appropriate level of disclosure of conflicts of interest has been made by advisors in particular.

   b) MEUG is not satisfied that the Authority has provided a satisfactory reason as to why progress is urgently needed to allow implementation of changes to TPM, should that be found desirable, by 1st April 2013.

   c) The decision by the Authority to decline our request for an extension to the deadline for submissions has cut short our ability to examine all issues in the consultation paper. To that extent this submission focuses on the most important issues identified to date and therefore cannot be taken as our definitive view on all issues.

8. MEUG is likely to wish to seek a discussion on these and other matters directly with the Authority Board in the very near future.

Yours sincerely

Ralph Matthes
Executive Director