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Submissions
Electricity Authority
Wellington

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TPM working-paper: long-run marginal cost charges

1. Vector welcomes the opportunity to provide this submission to the Electricity Authority (the Authority) on the Transmission Pricing Methodology (TPM) Review: Long Run Marginal Cost (LRMC) charges Working Paper.
2. Vector's contact person for this submission is:
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3. We support the submission of the Electricity Networks Association (ENA) on this matter.

Purpose of the Working Paper

4. Paragraph 2.6 of the Authority's working paper notes that the purpose of the working paper is to assist the Authority to understand whether LRMC based transmission charges are better than the status quo or implementing charging approaches that the Authority has previously proposed – in particular, beneficiary pays charging.
5. Vector is concerned about the academic nature of the Authority's inquiry. The Authority's inquiry is about discovering a solution to a problem that has not been articulated. Rather, the Authority appears to be looking for affirmation that there is a better approach than the current TPM. This is not a valid reason for a review.
6. The starting point for a consultation about changing the law, in this case the Electricity Industry Participation Code (the Code), should be to identify the

problem with the status quo. The Authority's working paper does not do this. Vector believes that, together with all previous discussion papers, this LRMC paper should have followed the Authority's problem definition consultation paper. Vector **recommends** that the Authority defer its consideration of LRMC until the Authority has finalised the problem definition consultation.

7. Therefore this submission does not address the detail of how LRMC charging could be applied as we consider that question to be premature. Instead we re-iterate the key findings from Vector's submission on the Beneficiaries-pay Working Paper (Beneficiaries-pay submission),¹ without repeating the arguments from that submission in full.

Does the Authority have a mandate to review the TPM?

8. While the Authority's working papers on the TPM have to date not resulted in any decision, the issue of whether the Authority has requisite power to unilaterally initiate a review into the TPM is yet to be resolved. Vector has serious concerns that any decision to change the TPM as a result of this review will be found to be *ultra vires*.
9. As noted in Vector's Beneficiaries-pay submission, it does not believe the Authority has an unfettered right to review the TPM in the Code.
10. Rather, the Code clearly specifies that the requirement to determine a TPM lies with Transpower. The Authority may only review an approved TPM if it considers there to be a material change of circumstances. However, the working papers to date have yet to articulate the material change of circumstances prompting the current review.
11. The Authority does have the power to create a guideline to support Transpower's process of determining a TPM. The Code also operates on the presumption that the TPM currently specified by schedule 12.4 is in the long-term benefit of end-users.
12. A guideline would assist Transpower to demonstrate that any new methodology it may wish to propose would be in the long-term benefit of end-users. Vector considers such guidelines could be helpful in the future should Transpower wish to commence another section 12.85 review similar to the current operational review on foot.

¹ Vector Limited, *Submission to the Electricity Authority Transmission Pricing Methodology: Beneficiaries-pay options*, 25 March 2014.

New Zealand's wholesale electricity market

13. Vector notes the New Zealand electricity market is premised on locational marginal pricing (LMP) at the node for allowing efficient dispatch of generation to meet requisite electricity demand using the available grid resources while also recognising the physical characteristics of electricity.
14. This system is finely balanced by the price signal, forward market and accompanying financial instruments to ensure generation and transmission resources are efficiently utilised and upgraded to meet the required demand for energy.
15. As we outlined in our Beneficiaries-pay submission, nodal pricing is the locational signal for both investment in and utilisation of generation and load management and Part 4 is the mechanism to achieve efficient investment in transmission assets. In requiring reform to the TPM the Authority has clearly stated that it considers a greater need for locational signalling through transmission pricing. However, the obvious impact of such an overlay is that it is likely to mute or even militate against the current nodal price signalling.
16. Vector cautions against any action that will distort the effective operation of this market to the detriment of allocative efficiency and dynamic efficiency in generation investment while also interfering with the objectives of the Part 4 of the Commerce Act, as outlined below.

How does the TPM fit within Transpower's regulatory framework?

17. As discussed in Vector's Beneficiaries-pay submission, as the owner/operator of New Zealand's electricity grid, Transpower's maximum allowable revenue (MAR) is set pursuant to Part 4 of the Commerce Act by the Commerce Commission (the Commission).
18. Further, Transpower is required, again pursuant to Part 4 of the Commerce Act, to seek approval for any "major" new grid investments it intends to make. The Commission evaluates these proposed grid investments using a national net benefit test. If the Commission approves a grid investment proposal Transpower is able to recover the full cost of that investment as if those assets were sunk and their costs unavoidable (i.e. it is included in the MAR).
19. The TPM becomes responsible for *efficiently* allocating Transpower's allowable revenue amongst its customers.
20. Therefore, above all else, the TPM must be capable of allowing Transpower to recover its allowable revenue. The TPM must operate in unison with the

Commission's revenue calculation and cannot frustrate Transpower's ability to fully recover its MAR.

Dynamic efficiency in transmission

21. As noted above and in our Beneficiaries-pay submission, Part 4 of the Commerce Act and IMs are the tools for determining the dynamic efficiency of grid investment. The role of the TPM is not to interfere with either the Part 4 IMs or nodal pricing signals.

Long-run marginal cost assessment

22. Vector also acknowledges the ENA's concern that the Authority's paper is drafted with the pre-determination that LRMC pricing cannot be implemented due to insurmountable practical problems.
23. This appears to give the Authority further reason to support its alternative pricing approach. However, Vector notes that the problems involved with implementing LRMC are equivalent to a beneficiaries-pay or SPD model for TPM.
24. If the problem definition identifies a clear problem to be solved, Vector **recommends** the Authority continue to assess whether LRMC will better achieve the statutory objective than the status quo. However, this consultation has not identified any shortcomings to LRMC that are not present in the other alternative TPM methodologies proposed by the Authority. If no problem is robustly identified, then the Authority should turn its attention to other matters and not consider making unnecessary changes to the TPM, whether LRMC-based charging or any other approach.

Vector's recommendations

25. Since the issues raised by Vector in this submission are identical to those raised in our response to those raised in our Beneficiaries-pay submission, we repeat the conclusions from that paper below.
26. We question whether the Authority has:
 - a) Identified a problem that must be resolved;
 - b) Even if it has identified a problem, is the proposed solution consistent with good market design as applied in New Zealand;
 - c) The jurisdiction to propose a "methodology" as opposed to "guidelines"; and

- d) Presented a proposal that materially improves consumer welfare.
27. We are concerned that the Authority has misrepresented the support submitters have attributed to its Issues Paper. We would like to reiterate that without a clear problem definition we do not support the design of the beneficiaries-pay approach or the LRMC as proposed in the 2012 TPM Proposal or the design of the options proposed in the associated Working Papers.
28. In our response to the Beneficiary-pays submission we offered our "back to basics" submission in the hope that the Authority will:
- a) recognise the flawed assumptions in its approach;
 - b) step back from what appears to have become an entrenched fixation to promote better targeted and better timed transmission using a beneficiaries pays approach to transmission pricing;
 - c) recognise that it is primarily the role of Part 4 and not the role of the TPM to encourage the efficient timing and location of transmission investment;
 - d) recognise that transmission assets are sunk and their efficient costs sunk and unavoidable, both in practice and as recognised by Part 4;
 - e) recast its objective to be consistent with our regulatory regimes; and
 - f) therefore consider other possible designs to the TPM.
29. Until such time as these fundamental issues are addressed, Vector sees little point in developing detailed proposals on LRMC-charges or any other major change to the TPM.

Yours sincerely,



Bruce Girdwood

Group Manager Regulatory Affairs