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SUBMISSION ON THE ELECTRICITY COMMISSION'S DRAFT REPORT ON TRANSMISSION TO ENABLE RENEWABLES

Introduction

1. Vector welcomes the opportunity to submit on the Electricity Commission's (the EC) "Draft report on transmission to enable renewables" ("draft report") released for consultation on 4 April 2008.
2. At a high level, Vector supports the identification of generation development potentials and the development of network scenarios to identify shortcomings in the grid and develop grid solutions. While we acknowledge that not all potential will eventuate, having a blueprint will enable decision makers to focus on the big picture.
3. Vector believes it is important that in undertaking this work the EC is cognisant of the Government's wider strategy around renewables, climate change and security of supply.
4. Vector has not commented in detail on the accuracy of the data provided, or the Commission's detailed analysis. At a high level this submission focuses on:
 - The importance of security of supply
 - Small scale vs large scale renewables
 - Locational signals for generation investment
 - Transmission and generation lead times
 - Consideration of efficient non-transmission alternatives to enable renewable connection
 - Grid upgrade and investment review process

Importance of security of supply

5. Renewable generation location is primarily determined by the availability of primary resources. The draft report indicates that the location of significant scale renewable generation will typically be remote from demand centres (i.e. Southland). In Vector's view, this reinforces the need for robust transmission systems between generation and load. In line with the GPS, Vector supports increased diversity and capacity into major load centres. A strong transmission grid will invariably remain a necessity to a secure and efficient electricity system.

Small scale vs large scale renewables

6. While Vector understands and supports the EC's focus on supply side investments as part of the grid upgrade and investment review process (GUIRP), Vector believes further clarity is required around the respective roles of larger scale supply side renewable investments and smaller scale demand side solutions in terms of meeting the Government's 90% renewables target.

Locational signals for generation investment

7. There are minimal locational signals for generation as long as generation does not pay for use of system (interconnection) under the transmission pricing methodology. In section 2.2.14, Meridian states that by Transpower spending \$37 million, about \$1500 million of new generation investment can be unlocked. Vector believes that this is a clear signal for a review of appropriate counterparties to transmission agreements. If generators were counterparties for interconnection (and therefore paid for use of system), their decisions would reflect all costs and provide strengthened incentives to influence transmission upgrades.

8. Vector looks forward to the Commission undertaking further work on locational pricing for transmission in the near future. While we acknowledge that this is a complex area, we believe that there is potential to incentivise the efficient location of (renewable) generation via locational pricing.

Transmission and generation lead times

9. At a high level, Vector supports Trustpower's view (2.2.6) for the acquisition by Transpower of options to acquire land. Having land options and resource consents in place would greatly reduce the lead-time gap.

10. Vector observes that a lack of commitment from generators in relation to proposed investment can and has created large uncertainties with respect to both transmission and downstream distribution investment. Contact's Otahuhu C and Genesis' Rodney power station are examples. An alternative approach to Transpower acquiring options to purchase land would be for the generator to provide funding for the option, given that they are more informed about the timing

and decision. When the land is subsequently required for the transmission line, the generator can sell the land to Transpower at cost.

Consideration of efficient non-transmission alternatives to enable renewable connection

11. Vector supports the consideration of non-transmission alternatives to enhance interconnection grid capacity to better enable renewable connection. In our view, it is important that the process of formally seeking information from non-network providers as to possible non-network alternatives to a proposed network investment allows sufficient time for appropriate consideration and response, and for the potential aggregation of smaller transmission alternatives to combine into a material alternative. Vector believes there is potential for improvement in terms of how this is integrated into the GUIRP without leading to significant delays in the process.

12. Other than passing the GIT for investment in interconnection assets, the EC/generators are looking at intertrips/runback schemes to limit the requirement for (act as alternatives to) transmission upgrades (i.e. limit the generation injection at times of transmission constraints). Vector believes this is reasonable as long as it does not place security of supply at risk over the longer term.

Grid upgrade and investment review process

13. Vector supports the clarification of roles as set out in EC's recent consultation on the GUIRP. Vector endorses the Commission's view (p15 of the consultation document) that it is not enough that the investment may enable renewables – it must also satisfy the economic test in the GIT.

14. Vector supports the view that any subsidy to renewable generation needs to be made explicit, so that the true costs of various options can be considered. This becomes even more important under an Emissions Trading Scheme to ensure no double counting of the carbon externality occurs.

15. Vector supports Transpower taking all reasonable steps to facilitate future investment and supports an approach by the Commission which allows for preparatory work (e.g. acquisition of easements) being undertaken for future investments.

Concluding comments

16. Thank you for your consideration of this submission. Please feel free to contact me or Rochelle Alban, Rochelle.alban@vector.co.nz, 09 978 8284 should you wish to discuss this matter further.

Kind regards

A handwritten signature in black ink that reads "Ewan Gebbie". The signature is written in a cursive style with a small flourish at the end.

Ewan Gebbie

Group Manager Regulatory Performance