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13 July 2007

Jenny Walton  
Electricity Commission  
PO Box 10041  
Wellington

Dear Jenny,

**SUBMISSION ON ELECTRICITY COMMISSION'S DECISION ON  
TRANSPOWER'S OTAHUHU SUBSTATION DIVERSITY PROPOSAL**

Vector welcomes the opportunity to comment on Transpower's "Otahuhu Substation Diversity" project proposal and the Electricity Commission's (EC) "Reasons for Decision set out in Notice of Intention to Approve Transpower's Otahuhu Substation Diversity Proposal" (25 May 2007). As outlined in our previous submission (12 February 2006), Vector believes that Transpower's proposal represents a significant step in improving much needed supply reinforcement to Auckland.

Vector supports the EC's intention to approve the proposal. Vector believes the EC's analysis as set out in the "Reasons for Decision set out in Notice of Intention to Approve Transpower's Otahuhu Substation Diversity Proposal" (25 May 2007) is robust (although Vector has not submitted on the cost details and the application of the GIT). The purpose of this letter is to reinforce Vector's support for the proposal and set out our high level views on the key risks associated with diversity and high impact low probability (HILP) events.

*Improved diversity*

In Vector's view, the proposed Otahuhu upgrade will provide improved diversity and security into Auckland. Vector acknowledges that reliability will be further enhanced by constructing a second major transmission node at Pakuranga serving Auckland, but this development will take place over a longer timeframe. Vector believes these two are complementary - even with the development of a second entry point, the load to the west of the region will remain critically dependent on the reliability of the Otahuhu node. This load includes key infrastructure including but not limited to Middlemore Hospital, the Mangere Water Treatment Plant, Auckland International Airport, and a number of large industrials (e.g. Pacific Steel).

*Susceptibility to HILP events*

In Vector's view, given the potential for very high impact events at Otahuhu (New Zealand's biggest substation), practical judgement is required in developing an acceptable level of risk exposure. Vector supports the EC's use of 1 in 100 year probability. As the distribution network owner and operator in Auckland, Vector believes the size of load currently supplied by Otahuhu already exceeds a comfortable risk level.

Thank you for considering this submission. Please feel free to contact myself or Rochelle Ladd, Vector's Regulatory Advisor (09 978 8284, Rochelle.ladd@vector.co.nz) if you would like to discuss any of the issues 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