



TRANSPOWER

Keeping the energy flowing

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Alex Sim
Manager
Commerce Commission
P O Box 2351
Wellington 6140

Dear Alex,

Cross Submission - Bunnythorpe-Haywards Reconductoring Investment Proposal

Transpower is making this submission in response to the submissions made by John Irving, MEUG and Meridian on our Bunnythorpe–Haywards reconductoring investment proposal.

John Irving submission

John Irving's submission questions why the use of High Tension Low Sag (HTLS) Conductors was not considered as an option in the proposal.

A number of new alternative conductors were considered in our long list consultation¹. HTLS conductors did not make the short list because of the high cost relative to our standard conductor options and as such they would not have been economic. The use of HTLS conductors in this instance would also materially affect system losses over the lifetime of the conductor. Additionally, we do not have experience with these conductors in a high wind harsh coastal corrosive New Zealand environment.

We are however interested in finding out how newer technology conductors perform this coastal environment and will trial a number of alternative conductors on sections of the line as part of this proposal. This is described in section 7.1 of our main proposal document².

¹ <https://www.transpower.co.nz/projects/bunnythorpe-haywards-and-b-transmission-line-investigation/bunnythorpe-haywards-and-b-0>

² https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/BPE-HAY%20Investment%20Proposal%20Final.pdf

MEUG submission

MEUG's submission observes that a lower demand forecast would economically favour Zebra at 65°C rather than Zebra at 75°C as proposed. Whilst, as MEUG submits, the cost difference between these two options is material at \$10.5m, the expected net market benefits are similar (within \$4million) under both demand forecasts. Under the Investment Test, such results are considered to be economically equivalent and require the inclusion of unquantified benefits to determine the preferred option.

By considering unquantified benefits, Zebra at 75°C is the preferred option under both demand forecasts. As outlined in our proposal document³ we consider that Zebra at 75°C strikes a good balance between the level of works required on the circuits, electrical efficiency of the solution and allowing for future uncertainty.

We will re-evaluate the benefits during construction as we plan to deliver the project in discrete stages over five years. The reviews will account of the updated likely end cost, capturing the greater cost certainty from completion the first stages including innovations to reduce project cost.

Meridian's submission

Meridian's submission notes that with the advent of a Financial Transmission Rights (FTR) market, it is "critical that Transpower provide as much notice of its plans for transmission capacity and transmission outages."

We note the importance of timely notice to market participants and will strive to improve our planning and communication to the market of anything that may affect FTRs in the future.

Yours sincerely



John Clarke
General Manager Grid Development

³ https://www.transpower.co.nz/sites/default/files/uncontrolled_docs/BPE-HAY_Investment_Proposal__Attachment_E_-_Investment_Test_Final_Draft.pdf