



MAJOR ELECTRICITY USERS' GROUP

19 October 2016

Doug McNeill
Transpower
By email to douglas.mcneill@transpower.co.nz

Dear Doug

Bunnythorpe to Wilton line (Judgeford to Wilton section) reconductoring

1. This is a submission by the Major Electricity Users' Group (MEUG) on Transpower's consultation paper "Long-list consultation: Bunnythorpe to Wilton line (Judgeford to Wilton section) reconductoring" published 12 September 2016.¹
2. MEUG members have been consulted in the preparation of this submission. This submission is not confidential. Some members may make separate submissions.
3. MEUG notes Transpower has identified the need for this investment as driven principally by safety concerns and asset condition.² We support the maintenance of safety standards and appropriate levels of system security and reliability.
4. The consultation paper lists two purposes.³ First to consult on the long-list of options and key assumptions. Second inviting parties to suggest non-transmission solutions (NTS). MEUG has no views on the latter nor the long-list of transmission options. The focus of this submission is to ensure the next phase of analysing a short-list of options and a draft application of the Investment Test is robust.⁴ Hence we have responded to selected questions on key assumptions as follow:

Question	MEUG response
1. Are there any other considerations relating to the need that we should incorporate into this project?	An assessment of the exacerbators and beneficiaries of the yet to be decided proposed option and the incremental costs they will pay versus the benefit they will receive.

¹ <https://www.transpower.co.nz/bunnythorpe-wilton-reconductoring-investigation>, document URL https://www.transpower.co.nz/sites/default/files/projects/resources/Bunnythorpe-Wilton%20%28JFD-WIL%29%20Reconductoring%20Long-list%20Consultation_1.pdf.

² Long-list consultation paper, piii.

³ Ibid, piii.

⁴ Ibid, details of the next consultation are discussed s. 6.2, p21.

Question	MEUG response
	<p>Having this information available in the future consultation on short-listed options may help focus exacerbators and beneficiaries to be innovative and discover lower cost options.⁵ This may happen notwithstanding that decisions on the review of TPM may still be under consideration.⁶ Nevertheless exacerbators and beneficiaries will know they are on notice to pay for this work if TPM changes to a cost-reflective and service-based basis.</p>
<p>5. Are our demand forecast assumptions appropriate for this investigation? If not, please outline any significant (>5 MW) increases or decreases in load you expect to occur in the Wellington region.</p>	<p>There is uncertainty as to whether historic rates of peak demand growth closely linked to GDP observed prior to the 2007-08 Global Financial Crisis (GFC) will return as illustrated in figure 7-1.⁷ If observed de-linking of GDP growth and peak electricity demand growth since the GFC continues then that will affect decisions on any change in size of reconductoring and or equivalent NTS; but not when remedial action is needed as deterioration of the circuits is independent of peak demand growth.</p> <p>A good outcome would be for MBIE to update the just published Electricity Demand and Generation Scenarios (EDGS) in one or two years' time. The additional years actual data may assist determine if prior historic drivers of peak demand still apply or not. The revised demand forecasts would allow more certainty for applying the Investment test for this and other investment proposals.</p> <p>The assumed P90 (90th percentile) demand forecast for the first seven forecast years as the prudent demand forecast and thereafter the P50 is a standard Transpower uses for all projects. MEUG is unsure if use of a one-size fits all P90 for the first seven years is optimal or if other settings may be better. For example why not use a lower percentile for the near term where there are maintenance or other options available allowing deferral of decisions on high cost longer term solutions?</p>

⁵ The cost of the preferred solution is yet to be determined. An estimate for the work was included in the Transpower IPP Determination 2015, schedule I: Listed Projects. For RCP2 the cost for BPE-WIL A (WIL-JFD section) was \$49m. A further listed project was for BPE-WIL A (BPE-JFD section) at a cost of \$107m with \$4m in RCP2 and \$103m in RCP3, refer Consolidated IPP published 22 August 2016 <http://www.comcom.govt.nz/dmsdocument/14637> at <http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-individual-price-quality-regulation/transpowers-price-quality-path-from-2015-to-2020/>. The current consultation paper refers to the second of these two listed projects on p7 noting under the current proposal "It may be more efficient to reductor a longer section of the line to defer future reconductoring work,"

⁶ Long list consultation paper, p20 notes this work under current TPM is charged as an interconnection asset.

⁷ MEUG submitted on this point to Transpower on the Waikato and upper North Island Voltage Management, 30 August 2016, paragraph 4 c), p2, refer <http://www.meug.co.nz/node/799>

Question	MEUG response
<p>4. Do you agree with our criteria for short-listing?</p> <p>If not, which criteria should we modify, include or remove, and why?</p>	<p>MEUG agree the criteria listed on page 19 and detailed in appendix B are reasonable.</p> <p>MEUG notes and agrees with the decision by Transpower not to include “consumer benefits through enhanced competition” as a criteria as previously proposed in Transpower’s September 2013 consultation paper on this project. MEUG opposed inclusion of that criteria.⁸</p>
<p>7. Do you consider the proposed calculation period of 40 years appropriate for the Bunnythorpe to Wilton A Judgeford to Wilton Section Reconductoring investigation?</p>	<p>If the life of new reconductoring is 40 years then that is appropriate as a counterfactual time horizon to assess all options. It may be prudent as a scenario to test if the preferred option differs using the Transpower Capex IM default of 20 years. The Capex IM review by the Commerce Commission next year may also consider the time frame to be used in Investment Tests.</p>
<p>8. Do you consider this VoLL (\$25,300/MWh) appropriate for valuing unserved energy?</p>	<p>Transpower should consider using the more recent analysis by the Electricity Authority.⁹ The Capex IM review by the Commerce Commission next year may also consider this Investment Test assumption.</p>
<p>9. Do you consider this VoLL appropriate for valuing lost load for your business? If not, what alternative VoLL would you recommend and what evidence are you able to provide to support your recommendation?</p>	<p>See answer to Qu. 8 above.</p>
<p>10. Do you consider a discount rate of 7% appropriate for this investigation?</p>	<p>The Capex IM review by the Commerce Commission next year may also consider this Investment Test assumption. If so that may assist decide the discount rate to apply for the Investment Test for this work.</p>

5. We look forward to next steps on this work.

Yours sincerely



Ralph Matthes
Executive Director

⁸ MEUG to Transpower, Bunnythorpe-Haywards Conductor Replacement, 18 October 2013, answer to Qu. 2, refer <http://www.meug.co.nz/node/562>.

⁹ Refer Electricity Authority, Investigation into the Value of Lost Load in New Zealand – Report on methodology and key findings, 23rd July 2013, URL <http://www.ea.govt.nz/dmsdocument/15385> at <http://www.ea.govt.nz/about-us/what-we-do/our-history/archive/dev-archive/work-programmes/transmission-work/investigation-of-the-value-of-lost-load/development/stage-3-report-on-methodology-and-key-findings/>