28 June 2017

Keston Ruxton
Regulation Branch
Commerce Commission
Wellington

By email: regulation.branch@comcom.govt.nz

Dear Keston

Capex IM review: issue identification via focus areas

We appreciate the opportunity to cross-submit to the problem definition stage of the Commission’s review of the Capex Input Methodology (Capex IM).

Submissions were positive about the way we operate and engage with our customers and other stakeholders. For example, Mercury is “pleased Transpower is open to providing sufficient information to all interested participants as to opportunities to provide support for the grid” which “will enable multiple solutions to be proposed and the most cost effective and fit for purpose option selected.”¹ On our publication Transmission Tomorrow, Pioneer Energy stated “we commend Transpower for the long-term strategic thinking...”².

MEUG expressed the view that “Transpower’s engagement with its contractual counterparties, other stakeholders and consumers in general has been continually improving.”³ We agree that we can further improve our engagement and collaboration with stakeholders, including the nature of the information and analysis we publish. We are holding a stakeholder workshop on July 27th to cover revenue and pricing, innovation, our planning report, demand response, and our Auckland strategy.

In this cross-submission, we discuss the following:

- We agree with the consensus that emerging technology has potential to provide more transmission alternatives for Transpower to consider. In addition, emerging technology provides opportunity for Transpower to optimise our provision of transmission services;
- We reiterate our view that the design of the Capex IM regulation should ensure that Transpower has strong incentives to innovate and improve efficiency, and sufficient flexibility to seek effective solutions;
- We explain that increasing the prescription of aspects of the Capex IMs is likely to be counterproductive as it creates risks in terms of our ability to act flexibly and with agility; and
- We clarify how the Investment Test deals with competition effects.

¹ Mercury, Transpower Capex IM review, 14 June 2017.
² Pioneer Energy, Transpower’s capex input methodologies review – Proposed focus areas, 14 June 2017.
³ MEUG, MEUG submission on Transpower capex input methodology review, 14 June 2017, paragraph 20.
Delivering efficient investment

Submissions considered the impact that emerging technology could have on the operation of the electricity industry, and raised the importance of Transpower being open to the role transmission alternatives can play in the efficient provision of electricity transmission services. A clear and recurring message we took from submissions was that our customers, and other stakeholders, want to ensure Transpower “appropriately incorporate, and optimise [emerging] technology into its operations.”4 We recognise the risk MEUG identifies of the “mismatch between the potential duration of the peak demand and the life of the reinforcing asset” and that, in such situations, it could be desirable to “use short-term alternatives.”5 These types of issues were raised in our Transmission Tomorrow publication.6

The IEGA sums up the potential impact of emerging technology well: “Transmission alternatives, such as investment by third parties in distributed generation, provides Transpower with flexibility to manage uncertainty about the future need, or timing of transmission investment. This is particularly important as the industry faces change due to emerging technologies and consumer decisions.”7

Various submitters, including IEGA, Pioneer Energy and Trustpower, noted the role of distributed generation as an alternative to investment in transmission infrastructure. We agree it has a role.

In responding to the changing landscape, we consider continued cost effective delivery of the regulated service can include the use of transmission alternatives and/or the use of emerging technology to optimise our service provision. The recent decision by the Commission on the use of emerging technologies supports our view: “…the Act is technology neutral…it does not matter whether a pole, wire or battery is used in delivering the regulated service, but rather that the regulated service itself is delivered and the costs for the delivery of the regulated service are accounted for.”8

Transpower does not have a bias towards owning assets over procurement of services. However, where ownership is more effective than procurement we would comply with the cost allocation rules of the IMs. The Commission has determined that “Where an asset is used to provide both regulated and unregulated services, suppliers must apply the cost allocation IMs to determine the appropriate treatment of costs and revenues attributable to the use of the battery for regulated services...where the battery is being used for the provision of the regulated service, an appropriate portion of costs can be allocated to the RAB.”9

The importance of incentives and flexibility

We are encouraged by the Commission’s statement that “We want to incentivise Transpower to continue to increase efficiency – to find new opportunities to make efficiency gains.”10 We consider the design of the Capex IM should provide the incentives for Transpower to innovate and improve efficiency, with sufficient ex ante clarity about potential risk/reward exposure.

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4 Contact, Transpower Capex IM Review, 14 June 2017.
5 Memo, Mike Hensen to Ralph Matthes, Advice on Transpower Capex Input Methodology, 14 June 2017.
6 https://www.transpower.co.nz/resources/transmission-tomorrow-2016-0
7 IEGA, Commerce Commission review of Transpower Capital Expenditure Input Methodology, 14 June 2017.
9 Ibid, para 243.
10 Commerce Commission, Transpower capex input methodology review: Proposed focus areas for the capex IM review, 15 May 2017, paragraph 67.
We also agree with the Commission that “where the environment becomes more uncertain”, the Commission should “look to maintain or enhance the flexibility that the IMs give businesses to respond and adopt ...”\(^{11}\).

In this respect, we also agree with Contact that “creating the right incentives for Transpower to be able to substitute capex for opex will be of critical importance. For example, if 4 years into RCP3 a third party solution emerges as more efficient than a capex solution, Transpower’s capex IM must have the flexibility to substitute that option” [emphasis added].\(^{12}\)

Similarly, Mercury is “supportive of Transpower having an increased opportunity and/or flexibility to undertake works that confer real option value ...”\(^{13}\).

For Transpower to have the right incentives and ability to consider the least cost or the most efficient option, a flexible set of Capex IM provisions is required so innovation or alternative solutions are not impeded.

**Counterproductive prescription**

We disagree with some submissions that suggest additional prescription for the Capex IM. We consider that the provisions are already complex and prescriptive and a reduction will allow more innovation, and for us to operate in a flexible and agile manner.

There have, for example, been suggestions the Capex IM should require Transpower to consider transmission alternatives for both base capex and major capex investment. Contact and Trustpower suggest lowering the $20m threshold for capex to be covered by the Major Capex Investment Test to ensure greater consideration of alternatives.

Our view is that setting the threshold between base capex and major capex needs to recognise:

1. All base capex has scrutiny applied at each regulatory reset by the Commission and through consultation invites other stakeholders to raise issues. The final decision on the level of revenue approved provides certainty for the future regulatory period;
2. Ex-ante certainty on a large proportion of our capex allows Transpower to manage our delivery efficiently and effectively through our internal governance processes, with incentives to ensure we are encouraged to adopt the most efficient/lowest cost transmission solutions;
3. Transparency of investment decisions can be achieved via information disclosure and stakeholder consultation in a less costly way than prescriptive regulated approval processes; and
4. Additional prescription creates risks in terms of our ability to act flexibly and with agility. Improving the regulatory incentives is less prescriptive and can avoid these risks.

**Applying the Investment Test**

The existing Investment Test identifies proposals on the basis of changes in electricity costs. Some submissions expressed concern that the Investment Test did not consider wholesale market competition effects but this is incorrect.

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\(^{11}\) Commerce Commission, Input methodologies review decisions Topic paper 3: The future impact of emerging technologies in the energy sector, 20 December 2016, paragraph 25.

\(^{12}\) Contact, Transpower Capex IM Review, 14 June 2017.

\(^{13}\) Mercury, Consultation Paper – Transpower Capex IM review, 14 June 2017.
As defined in the Capex IM:

“Competition effects means value of the expected change in economic surplus due to a change in competition among participants in the electricity market as a result of a major capex project undertaken by Transpower...”\textsuperscript{14}

To determine competition effects requires evaluating what effect the increase or decrease in competition in a region will have not only on fuel costs, but also on electricity consumption because of changing electricity prices. The competition effect is the expected change in economic surplus. The wealth transfer (the difference between the economic surplus and change in electricity prices) is not considered in the Investment Test.

Our experience has been that competition effects are difficult to quantify. Quantification requires forecasts of generator bidding behaviour both with and without a proposed investment. The quantum is small and we usually consider it negligible on the basis that it would not affect the investment decision. We did estimate the competition effect when evaluating the business case for HVDC Pole 3, but found the estimate would not change the investment proposal decision.

As we have previously indicated to the Commission, until future changes are made to the TPM, it is premature to consider the impacts on the Capex IM (including on the investment test for major capex). The Electricity Authority has not decided on its TPM Guidelines Review and there is currently no scheduled date for completion of the review.\textsuperscript{15}

Finally, the Capex IM has major impacts across our business. We have welcomed the opportunity to identify areas for improvement and for us to better understand the issues that are important to our stakeholders.

Please let me know if you have any questions or would like to discuss any of the points made in this cross-submission.

Yours sincerely

\[\text{Signature}\]

Catherine Jones

\textbf{Regulatory Affairs and Pricing Manager}

\textsuperscript{14} Schedule D Major Capex Investment Test, clause D6 of Capex IM

\textsuperscript{15} \url{http://www.ea.govt.nz/dmsdocument/22219#mctoc1}