

# IM Review 2023

## Capex IM Workshop

### Stakeholder Discussion

11 November 2022



# Purpose

- To discuss topics raised by Transpower in its 19 July 2022 submission to the 2023 IM Review Process and Issues paper. We will use the workshop as an opportunity to:
  - test the extent to which the existing Capex IM rules do not cover the issues raised by Transpower; and
  - identify how any gaps could practically be addressed.
- We propose 10 topics for discussion and plan to spend about 10 minutes discussing each of these. Topics include:
  - **Investment test and evaluation criteria** – Fibre IMs, evaluation criteria, unquantifiable costs and benefits, NZ Inc. benefits, sensitivity analysis, scenario modelling, investment value and cost/benefit uncertainty, minor clause changes and project staging.
  - **Resilience planning** – proactivity of resilience investment
  - **Climate change effects** – NZ Inc. benefits, decarbonisation and sustainability.
- Please note this workshop session will be recorded, with the recording available on our website

# Plan for today

Item	Time	Topic	Speaker
1	9.00 – 9.10am	Guests arrive: <ul style="list-style-type: none"> <li>informal introductions;</li> <li>help yourself to a coffee or tea;</li> <li>find a seat.</li> </ul>	
2	9.10 – 9.15am	Welcome and formal introductions: <ul style="list-style-type: none"> <li>Andy Burgess (GM Infrastructure Regulation);</li> <li>Dane Gunnell (Head of Price Quality Regulation);</li> <li>Commerce Commission staff; and</li> <li>Transpower and other attendee staff.</li> </ul>	Andy Burgess / Dane Gunnell
3	9.15 – 10.30am	Investment test topics, including: <ul style="list-style-type: none"> <li>Fibre IMs;</li> <li>evaluation criteria;</li> <li>unquantifiable costs and benefits;</li> <li>sensitivity analysis;</li> <li>scenario modelling;</li> <li>investment value, cost, and benefit uncertainty; and</li> <li>specific clause issues.</li> </ul>	Josh Wilson Simon Todd / Hazet Adam
4	10.30 – 10.45am	Investment test: Project staging	Hazet Adam
5	10.45 – 11.00am	Break	
6	11.00 – 11.15am	Resilience planning	Simon Todd
7	11.15 – 11.30am	Climate change effects, including: <ul style="list-style-type: none"> <li>NZ Inc benefits;</li> <li>Decarbonisation and sustainability.</li> </ul>	Simon Todd
8	11.30am – 11.45pm	Summary and concluding remarks	Dane Gunnell

Note: this slide pack references Transpower's Process and Issues paper submission available at:

[https://comcom.govt.nz/\\_data/assets/pdf\\_file/0027/288018/Transpower-NZ-Ltd-Submission-on-IM-Review-Process-and-Issues-paper-and-draft-Framework-paper-11-July-2022.pdf](https://comcom.govt.nz/_data/assets/pdf_file/0027/288018/Transpower-NZ-Ltd-Submission-on-IM-Review-Process-and-Issues-paper-and-draft-Framework-paper-11-July-2022.pdf)

# Ground rules for today

- Given we limited allotted time for each issue and that a majority of attendees are online we propose some ground rules for today:
  - respect the views of others (e.g., avoid speaking over others).
  - can we use the raise hand function on Teams if you wish to speak.
  - keep comments succinct (e.g., 1-2 minutes) so that all participants have time to contribute.
  - mute yourself when not speaking.
- These slides and all matters we cover at the workshop are intended to facilitate discussion and reflect the preliminary thinking of Commission staff only. They do not reflect Commission positions or in any way prevent the Commission from taking different positions on the relevant matters.

# Investment test discussion

## Fibre Capex IMs

- Fibre Capex IMs share key features with the Transpower Capex IMs
  - Processes and timeframes for developing and evaluating capex proposals.
  - Base capex + additional capex reopeners to address timing and cost uncertainty.
  - Evaluation criteria based on the principle of prudent and efficient expenditure that reflects good telecommunication industry practice.
- Evaluation criteria apply to all capex proposals
  - Allows for flexible approach to evaluating wide range of potential capex programmes and project types and market specific factors.
  - No grid investment test for major network expansion capex (e.g., Transpower's MCP).
- Background to evaluation criteria approach
  - Challenge in developing an investment test for expansion capex with no definitive VoLL and related market benefit.
  - Consideration of fibre market specific factors e.g., competition from alternative technologies.

# Investment test discussion

## Grid investment test – evaluation criteria

- Transpower submitted:

“The Investment Test could be improved by adopting the Fibre Capex IM’s singular evaluation criteria (expenditure objective).” (P+I submission p. 10)

“The evaluation criteria and assessment factors in the Fibre Capex IM are a notable departure from the Transpower Capex IM and may be better suited to challenges the electricity industry faces in adopting to the transition to a low emissions economy.” (P+I submission p. 10)

- Some discussion points and questions:

- How could the evaluation criteria and assessment factors set out in the Fibre IMs more appropriately justify transmission investment for a ‘transition to a low emissions economy’ and for the long-term benefit of consumers?
- How would you see the prudent and efficient evaluation criteria interacting with the costs and benefits and cost-benefit test set out in the Capex IM?

# Investment test discussion

## Grid investment test – unquantifiable costs and benefits

- Transpower submitted:

“The Capex IM should not include arbitrary constraints such as the limitation that unquantified benefits are capped at “10% or less of the aggregate project costs”. The appropriate assessment of unquantified benefits is a matter which could be considered on a case-by-case (investment-by-investment) basis” (P+I submission p. 12)

- Some discussion points and questions:

- Schedule D1(3) allows Transpower discretion to propose “an alternative percentage to 10%” when treating a cost or benefit as unquantified.
- What percentage would be more reasonable than 10%?
- We are interested to understand if unquantified costs and benefits are increasing in the transmission sector and if so, why?

# Investment test discussion

## Grid investment test – sensitivity analysis

- Transpower submitted:

“A comparison of the Fibre and Transpower Capex IMs’ sensitivity analysis requirements provides a good example where we consider that the Transpower Capex IM includes unduly prescriptive requirements.” (P+I submission p. 13)

“The key elements of the existing requirements which should be retained are that Transpower can justify the choice of sensitivity analysis and the analysis is sufficiently robust to rely on to demonstrate an investment option should be approved.” (P+I submission p. 14)

- Some discussion points and questions:

- Schedule D7(1) sets out the sensitivity analysis Transpower needs to apply in the investment test “save where it is neither reasonably practicable nor reasonably necessary”. What do stakeholders see as the relevant issue or concerns with the sensitivity analysis?
- If the requirements of D7(1) were amended, how would stakeholders prefer to see this framed and applied?
- We understand uncertainty has increased and should make sensitivity analysis even more relevant. How does this relate to the submission point raised?



# Investment test discussion

## Grid investment test – scenario modelling

- Transpower submitted:

“The prescriptive requirements for demand and generation scenario modelling, including the requirement to model “all” the scenarios published by MBIE and “reasonable variation” (again with a prescriptive list of variations) have given rise to practical issues and would result in a modelling an excessive amount of scenarios and sensitivities if a ‘black letter’ interpretation of the IM is adopted” (P+I submission p. 14)

- Some discussion points and questions:

- Can Transpower describe generally how it uses scenarios to inform its analysis of demand-driven and generation-driven projects?
- The MBIE generation scenarios are energy scenarios and do not specify the location or capacity of demand and generation growth. What process should be followed to ascertain these specifics?
- In what situations would the MBIE scenarios no longer be appropriate?
- We understand demand and generation uncertainty has increased and should make scenario analysis even more relevant. How does this relate to the submission point raised?

# Investment test discussion

## Grid investment test – investment value, cost and benefit uncertainty

- Transpower submitted:

“One of the problems with highly prescriptive requirements is that it results in a ‘one size fits all’ approach which does not necessarily take into account investment specific matters such as the value of the investment or the extent of uncertainty around its costs and benefits” (P+I submission p. 11)

- Some discussion points and questions:

- How could the present investment test better “take into account” the value of the investment?
- What additional uncertainties could be added to the present costs and benefits specified in the Capex IM investment test?
- Regarding uncertainty of investment test costs or benefits – how could the Capex IM evaluation criteria - cl. 6.1.1(2)(c) provide more guidance when capex proposals are being developed?

# Investment test discussion

## Grid investment test – minor clause issues

- Transpower submitted:

Regarding Clause 3.2.1 “The definition should be clarified to avoid capturing ongoing programmes of work which are already consulted on via the base capex proposal.” (P+I submission p. 37)

“...determining net market benefits for programmes or projects related to reliability may not be a reasonable evaluation criterion” (P+I submission p. 37)

“Schedule A clause A1 “general evaluation” contains a multitude of factors to have regard to that we consider are complicated to understand and apply.” (P+I submission p.36)

- Some discussion points and questions:

- We would like to discuss clause 3.2.1 further for clarification.
- In what circumstances would a Net Market Benefits test for reliability driven programmes and projects not apply?
- What would be more reasonable alternative evaluation criteria?
- What factors in clause A1 should be clarified and are there reasonable alternatives to those that are considered complicated?

Break – 15 minutes

# Investment test discussion

## Grid investment test – Project staging

- Transpower submitted:

“We propose that the Commission considers clarifying the staging process to allow for expenditure forecasts to be revisited once a more thorough estimate is complete.” (P+I submission p.9)

“We are considering options for managing such risk, and how to advance long-lead time projects to match the generation build lead times. Unless these are closely aligned there is risk that new renewable generation investments will be delayed” (P+I submission p.18)

- Some discussion points and questions:

- We will discuss project staging more generally but we have some questions regarding the issue of advancing “long-lead time projects to match the generation build lead times”.
- The 2022 Transmission Planning Report discusses generation runback schemes. Has Transpower considered runback arrangements to facilitate wider generation connections in lieu of transmission investment more generally and part of a staged investment process?
- What, if any, issues do generator stakeholders have with runback arrangements?

# Investment test discussion

## Resilience planning

- Transpower submitted:

“...the Capex IM should be explicit that the expenditure objectives under base capex for asset replacement and refurbishment expenditure extend towards resilience expenditure.” (P+I submission p.5)

“We propose the IMs should be flexible enough for the Commission to consider uncertainty mechanisms that could range across the following areas: i. Funding for 'proactive' resilience projects” (P+I submission p.30)

- Some discussion points and questions:

- Do stakeholders consider that the Capex IM definitions and IMs for base capex preclude the inclusion of capex for resilience?
- The Transpower P+I submission mentions several times, that a change to a low-emissions economy and greater electrification “heightens the importance of.....resilience”. Would VoLL not capture this effect?
- The RCP2 proposal contained a pro-active resilience programme that was accepted by the Commission. Is this resilience analysis considered no longer appropriate or applicable to the present situation?

# Investment test discussion

## Climate change effects – NZ Inc benefits

- Transpower submitted:

“.....a strict market benefit test may not be flexible enough to take into account wider NZ Inc benefits such as Government climate change policy and CO2 emissions, even if these benefits align with the long-term benefit of consumers” (P+I submission p. 11)

- Some discussion points and questions:

- What NZ Inc benefits do stakeholders think are currently excluded from the investment test, but should be included’?
- How would stakeholders think NZ Inc benefits could be calculated?
- Schedule D4(1)(I) allows that Transpower can include, as a cost or benefit in the investment test “any other benefit or cost occurring in the electricity market proposed by Transpower prior to its consultation on the short list of investment options and agreed to by the Commission”.
- Given Transpower models CO2 costs for thermal plant in its generation modelling, what needs to be added to the investment test to capture all CO2 emission effects?

# Investment test discussion

## Climate change effects – decarbonisation and sustainability

- Transpower submitted:

“The IMs could provide greater clarity on how expenditure proposals for sustainability (opex and/or capex) will be assessed” (Better Regulation submission p.8)

"There are several major challenges to meet these low carbon objectives within our transmission network portfolio – notably in the area of Sulphur Hexafluoride (SF6) reductions“ (Better Regulation submission p.8)

"As the single largest contributor to our total carbon footprint (5,037 tCO<sub>2</sub>e in 2019/20), we are investigating the feasibility and costs of a strategy to minimise SF6 leakage and look at alternatives to SF6. However, such a strategy will require investment in alternative technologies that will come at a higher cost“ (Better Regulation submission p.9)

- Some discussion points and questions:

- How could the IMs be amended to incorporate sustainability effects and provide greater clarity on expenditure proposals for sustainability?
- What does the future of sustainability look like for Transpower’s network, and how should this be addressed in the IMs? e.g., ETS, alternative technologies to SF6.



# Next steps

- Attendees have an opportunity to provide written feedback about what was discussed. This can be provided by email or presentation for example.
- Deadline for feedback in writing is 25 Nov 2022. Please use [im.review@comcom.govt.nz](mailto:im.review@comcom.govt.nz) email address with subject heading 'Capex IM workshop'
- We will collate attendee views and use these to inform our next steps.
- We are targeting Q2 2023 for the Transpower Capex IM workstream draft decision publication.