29 April 2025

Matthew Clark
Commerce Commission
By email: regulation.branch@comcom.govt.nz
CC: wbop@transpower.co.nz

Tēnā koe,

Transpower's Western Bay of Plenty (WBOP) major capex project proposal – draft decision

We welcome the opportunity to respond to the Commerce Commission (**Commission**)'s draft decision and reasons paper on Transpower's Western Bay of Plenty major capex project proposal (**WBOP MCP**).

We fully support Transpower's Option 2 for the WBP MCP and the Commission's draft decision. Due to our deep involvement in Transpower's planning process, we don't have any specific additional comments on the Commission's draft decision, but we look forward to continuing to collaborate closely with Transpower, the Commission and affected stakeholders on the subsequent stages of the Major Capital Project process for the Western Bay of Plenty.

Our summary observations on the draft decision are:

We will submit reopeners for contingent "uncertain projects"

- Transpower's preferred option requires $74.5m of investments in 33kV subtransmission to relieve security constraints in Tauranga that Powerco is better placed to construct, own, and operate
- We have also identified $34.6m of customer-initiated investments which are contingent on both Transpower's MCP and Powerco's subtransmisson projects
- We will likely submit reopener applications for the contingent security work and any dependent customer-initiated augmentation after the Commission publishes its final decision on the WBOP MCP

NTS can build on RCP2 Demand Response Programme

- The Commission included a provision for a "demand response programme" in Transpower's RCP2, clarifying the form of contracts that flexibility providers are required to offer services and the relationship between flexibility services for the Grid Owner and Electricity Distribution Businesses (**EDB**)
- The WBOP non-transmission solution (**NTS**) initiative is an opportunity to build on Transpower's learnings from the RCP2 Demand Response programme and subsequent industry development, particularly through the FlexForum and the ENA's Future Networks Forum (which both Transpower and Powerco are members of)
- The objective of the NTS project could be widen from just investment deferral to include efficient project derisking

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Our INTSA proposal will support NTS

- Powerco has recently applied for INTSA funding to pilot a load flexibility platform
- This application, if approved, it will provide a mechanism through which we will be able to support some distribution-embedded NTS in the WBOP as well as flexibility services for Powerco's related security projects
- We are keen to collaborate with Transpower in the implementation of its NTS and better understand how to optimise the use of flexibility services as non-network solutions for the long-term benefit of consumers

We are always keen to meet with the Authority to discuss and develop the ideas in our submissions. In the meantime, if you have any questions or would like to talk further on the points we have raised, please contact Emma Wilson (Emma.Wilson@powerco.co.nz).

Nāku noa, nā,

Emma Wilson
Head of Regulatory, Policy and Markets
POWERCO

We will relieve security constraints related to Transpower's option 2 through a reopener application

Due to the timings of the MCP,[1] Powerco's involvement, and associated investment has been uncertain and we have continued to refine and update our Asset Management Plans (AMP) accordingly (2023 and 2024 AMPs) but have not provided specific forecasting as there has been uncertainty around responsibilities for construction and timings depending on how Transpower's plans evolved, and the Commission's process progressed.

While there is still uncertainty associated with Powerco's investments related to the WBOP MCP, our 2025 AMP Update[2] provides more detail of "uncertain projects" related to the proposal. Transpower's proposed Option 2 requires us to invest roughly $74.5m to relieve security constraints in Tauranga that we have mutually agreed Powerco is better placed to construct, own, and operate as investments in our distribution network alongside Transpower's transmission upgrades as outlined by the table below.

Table 5.1: Uncertain projects across DPP4

Project name	Cost estimate	Uncertainty driver
Kinleith bulk supply	$13.9m	Customer timing
Triton substation upgrade	$4.3m	Customer timing
Greerton-Belk Road 33kV circuits	$16.6m	Customer timing
Belk Road substation	$18.0m	Customer timing
Linton Army Camp 33kV line	$5.9m	Customer timing
Normanby substation	$9.2m	Customer timing
Ōmokoroa substation and 33kV circuit	$10.0m	Govt project timing
Tauranga 33kV security constraints	$74.4m	Transpower
Maui St substation	$14.8m	Customer timing
Taotaoroa substation	$13.2m	Customer timing
Total	$180.0m	

As the MCP and Powerco's related 33kV security project would enable a major customer downstream to electrify their operations, our 2025 AMP update also contains two customer-initiated projects downstream of the 33kV project to relieve security constraints, which won't be effective until the Transpower work is complete this includes:

- $16.6m of subtransmission augmentation on the Greerton-Belk Road circuits; and
- $18.0m to augment the capacity of the Belk Road substation.

Following the Commission's final decision, we will refine the design and costings of the 33kV subtransmission project, and work with the large customer at Belk Road, to better understand their needs and timing before submitting reopener applications for the other two uncertain projects.

[1] Powerco, response to Transpower's WBOP MCP proposal, 15 September 2023

[2] Powerco, Electricity Asset Management Update 2025, 26 March 2025, page 31.

Non Transmission Solutions for the WBP MCP offer a great opportunity to build on insights from Transpower's RCP2 Demand Response programme

The WBOP NTS proposal provides a great opportunity to develop efficient mechanisms to share information and forecasts about distribution-embedded flexibility resources, better to support the efficiency and security of the energy market.

Transpower received an allowance for a "Demand Response programme" in RCP2. The WBOP MCP can build on the insights from this and subsequent industry work in the Future Networks Forum and the FlexForum to provide practical evidence of how EDBs and the Grid Owner can collaborate to minimise the cost of flexibility where possible and give the System Operator visibility of how demand bids change when flexibility is dispatched for network support.

The coordination of flexibility resources across multiple uses ("value stacking") has been widely discussed over the last decade but there have been no examples of projects which have attempted to optimise the use of flexibility for both the Grid Owner and the embedded EDB. An NTS in the WBOP MCP would provide evidence of how to coordinate flexibility resources across transmission and distribution most efficiently and in a way that benefits customers.

Powerco's Winter 2024 experience with its retailer hot water control trial[3] has provided empirical evidence that spot market and distribution peaks are coincident, this means retailers control hot water load at exactly the same time that an EDB would, to manage network peaks. It is likely that the same is true for transmission and distribution peaks. An efficiently designed NTS tender could therefore provide both distribution and grid support without the need for customers to pay twice for the same thing.

While the MCP relates to Transpower as the Grid Owner, visibility of large scale dispatchable flexibility resources are becoming increasingly important for the System Operator, as outlined in its submission[4] to the Electricity Authority's *Future operation of New Zealand's power system* consultation last year.

Success of a WBOP NTS could be related to derisking, not just strictly investment deferral. Transpower's proposal and the Commission's draft decision both link the NTS to a one-year transmission investment deferral. This is an appropriate goal, but it may benefit consumers more if it the goal for a successful NTS is described more widely.

The Electricity Authority's Innovation and Participation Group's review of the Transpower Demand Response Programme in RCP2 noted:

> *Transpower has shown real candour in explaining the limited opportunity that DER offers for deferring or avoiding transmission investment given that most NZ transmission assets are built to N-1 or higher levels of security – which means that all operating assets are duplicated or more than duplicated so that the system continues to supply load uninterrupted if a single asset fails. This duplication allows Transpower to operate Special Protection Schemes where the loading of circuits close to capacity are reduced by splitting flows across*

[3] https://www.powerco.co.nz/news/media/residential-hot-water-control-trials

[4] https://www.ea.govt.nz/documents/4952/Transpower_ZEeTxiw.pdf pages 7 to 10.

the duplicate assets – increasing the risk of non-supply for a proportion of the load but at low probability and for short periods of time which is almost always cheaper than buying transmission alternatives from flexibility portfolios based on DER or larger resources[5].

The WBOP NTS could be used to provide evidence about the relative risks, costs and benefits of flexibility as a NTS relative to special protection schemes. Although Transpower's proposals for the WBOP NTS do identify how flexibility can be used to defer the project, the wider learnings of how most efficiently to use flexibility for risk management in future MCPs would be of equal if not greater benefit to consumers.

WBOP NTS would be a great case study for Powerco's load flexibility platform INTSA application

Powerco recently applied to the Commission to trial a local flexibility market platform[6] through the new INTSA mechanism.

A local flexibility market is a non-traditional approach of reducing or shifting peak demand to meet network capacity needs, compared to conventional network reinforcement. This project will be an early trial of a local flexibility market, and the first one that Powerco is testing in collaboration with a number of other EDBs.

This trial, related to initiatives in Powerco's "DSO Programme", would provide the tools and capabilities to enable flexibility resources on the distribution system to offer NTS. The WBOP MCP would be an ideal real world case study on which to deploy them and from which Transpower, Powerco and the wider industry can learn how best to maximise long-term benefits to consumers. We are keen to work with Transpower on the potential of this.

[5] Review of the Transpower demand response programme, IPAG. July 2021. p. 6

[6] https://comcom.govt.nz/__data/assets/pdf_file/0027/365805/INSTA-Application-Powerco-Local-flexibility-market-platform-8-April-2025.pdf