



8 December 2025

Matthew Clark
Transpower and Gas Manager
Commerce Commission
PO Box 2351
WELLINGTON

Dear Matthew,

Notice of intention to initiate Stage 2 of the Waikato and Upper North Island Upgrade staged major capex project.

This letter is notice under clause 3.3.1(1) of the Transpower Capital Expenditure Input Methodology Determination 2012 (**Capex IM**) of Transpower's intention to plan a subsequent stage of a major capex project (staged) which may become a proposed investment.

This project is the second staging project (Stage 2) of the Waikato and Upper North Island Upgrade which is a major capex project (staged). We initially notified the Commerce Commission (**Commission**) of our intention to plan the Waikato and Upper North Island investment on 27 May 2016¹ and the Commission subsequently approved Stage 1 of Transpower's Waikato and Upper North Island Voltage Management staged major capex project on 23 September 2020.² The Stage 1 investments are now largely complete; we commissioned new STATCOMs at our Hamilton substation (in May 2023), and at our Ōtāhuhu substation (in April 2025).³

Investment need

The Waikato and Upper North Island (**WUNI**) region faces increasing issues in thermal transmission capacity and voltage management. Growing electricity demand, along with closures of fossil-fuel power plants over the last decade, has made these problems worse. Without investment as regional demand grows, circuits may overload leading to voltage collapse and blackouts, while thermal capacity constraints may limit the region's electricity supply.

¹ This notification occurred before staged major capex projects were added to the Capex IM following the 2018 review. As a result, the original notice did not include the matters now specified in clause 3.3.1(2). Following the Commission's review of the Capex IM, we wrote to the Commission on 15 March 2019 to update the Commission that the WUNI project would become a major capex project (staged) and that we anticipated the project would have at least two stages.

² [2020 NZCC Waikato and Upper North Island Voltage Management major capex project stage 1 - Decisions and Reasons Paper, 23 Sept 2020](#)

³ [Waikato and Upper North Island \(WUNI\) Upgrades | Transpower](#)

The WUNI transmission network includes parts of the core grid. Forecast electricity demand in the region is expected to exceed the N-1 thermal and voltage stability limits, meaning compliance with the Grid Reliability Standards (**GRS**) is at risk. This WUNI Stage 2 investment is therefore required to ensure thermal capacity and voltage stability can meet the N-1 standard of the GRS.

The primary investment need was first defined in 2016 as maintaining voltage stability in the Waikato and Upper North Island region, driven by immediate voltage related concerns at the time.⁴ Thermal constraints were also identified as a medium to long-term evolving issue.

The Commission approved the first stage of investments (Stage 1) that focused on those immediate issues. Our Stage 1 application indicated that additional investments would be required as future stages.⁵ Stage 2 was always intended to address both voltage and thermal N-1 limits, ensuring a reliable and resilient transmission network as demand continued to grow.

Given this, we view Stage 2 as a continuation of the original investment, but with a necessary revision of the wording of the investment need to align with the original long-term transmission requirements. We propose revising the investment need as ***maintaining voltage stability and adequate thermal capacity in the Waikato and Upper North Island region***. This revision reflects the broader and multi-stage nature of the investment, consistent with the original intent of the Stage 1 proposal. We are calling the potential project *Waikato and Upper North Island Upgrade Major Capex Project Stage 2* (WUNI Stage 2).

We are treating the potential project as a major capex project because some of the transmission investment options involve improving the service potential of the grid beyond that attributable to replacing existing assets with modern equivalents, and we expect the overall capex to exceed \$30 million.

Proposed timetable

Subject to the Commission's agreement, our preliminary timetable for this investigation is below. Building on our work and our previous consultations, we propose to work with the Commission on identifying the most efficient and expedient approach to advancing this project.

Date	Action
December 2025/January 2026	Publish short-list consultation
February 2026/March 2026	Short-list consultation closes
July 2026	Submit major capex proposal

⁴ [Waikato and Upper North Island Voltage Management Notice of Intention - May 2016](#)

⁵ [Waikato and Upper North Island Stage 1 Major Capex Proposal - December 2019](#)

As this is Stage 2 of a staged MCP, we propose that it is reasonable for Transpower to not undertake a long-list consultation. Instead, we propose proceeding directly to the short-list consultation, in accordance with clause 8.1.3(2)(b).

As part of the shortlist consultation, we will outline the electricity demand forecast and key assumptions we have used for this project. We acknowledge the 2024 release of new Electricity and Generation Demand Scenarios (EDGS) by the Ministry of Business, Innovation & Employment (MBIE), but we propose not to adopt the 2024 EDGS for this modelling. Our view is that our 2019 EDGS variations remain reasonable for assessing this project. We are working to convert the raw national and island form of the 2024 EDGS into GXP level information that we can use in our modelling. We do not expect the 2024 EDGS to significantly affect our analysis or conclusions, but we will test this by including select 2024 EDGS scenarios as sensitivities in our proposal. Our short-list consultation will be based on the 2019 EDGS variations with the sensitivities considered as part of the proposal.

We will also outline our approach to non-transmission solutions (NTS) during the short-list consultation. We propose a similar approach as used in the recent Western Bay of Plenty and Upper South Island MCPs. We intend to seek a maximum recoverable costs allowance for potential future NTS, the quantum of which is based on the deferral value of the NTS. Proceeding with any future NTS will be subject to the investment satisfying a net benefit test at the time.

We look forward to working with the Commission to agree on the timetable, including the approval timeframe, and the other matters in clause 3.3.1(3) of the Capex IM.

Yours sincerely

A handwritten signature in black ink, consisting of several overlapping loops and a trailing line to the right.

Stephen Jones
Grid Investment Group Manager

Annex 1: Background to WUNI Stage 1

The Waikato and Upper North Island Upgrade (Stage 1) major capex proposal project was approved by the Commerce Commission in 2020 at a total cost of \$144m.⁶ Works completed include:

- Installation of two STATCOM grid stability devices at the Hamilton and Ōtāhuhu substations.
- Implementation of variable line rating (VLR) has been implemented on numerous circuits supplying the WUNI area, with ongoing efforts to maximise thermal capacity.
- Investigations occurred into NTS options to fulfil dynamic reactive support needs, including feasibility, cost, and service levels.

Investigations during Stage 1 confirmed further investments are required to efficiently manage increasing load, as well as voltage and thermal constraints in the WUNI region.

⁶ [2020 NZCC Waikato and Upper North Island Voltage Management major capex project stage 1 - Decisions and Reasons Paper, 23 Sept 2020](#)