



TRANSPOWER

Tararua Enabling Renewables: Major Capex Proposal Long List Consultation

Summary of submissions and responses

August 2026



1 Executive summary

This document provides a summary of submissions received on Transpower's *Tararua Enabling Renewables: Major Capex Proposal Long List Consultation* of May 2026 (the consultation paper).¹

The consultation sought feedback on the investment need, assumptions, scenarios and a long list of potential transmission and non-transmission options for the possible electricity infrastructure investments in Tararua and Wairarapa region. The purpose of the consultation is to improve our information base on potential new generation and load developments in the region, including project timing, location and preferred grid connection approaches.

The long list considered upgrades to the existing 110 kV network, potential new 220 kV connection and interconnection assets and non-transmission solutions. These options are intended to test how a coordinated regional approach could unlock significant renewable generation potential, support efficient connection of wind, solar and battery projects and identify what assumptions would need to be true for more ambitious development plans to be economic.

We received fourteen submissions from stakeholders, including generators, electricity distributors, major consumers, regional groups and public agencies. Thank you to everyone who reviewed our consultation material and provided feedback.

In this document we have summarised the key points raised by submitters. We have also taken the opportunity to provide a response to the submissions, where appropriate.

Key themes and feedback:

- Submitters broadly supported the need for investment in principle.
- Submitters had differing views on why the Tararua region is prioritised with this MCP, agreeing on the strong renewable resource availability; submitters emphasised the need for whole-of-system analysis.
- Submitters provided feedback on our demand and generation assumptions with specific details on generation developments.
- Submitters provided suggestions on potential development plans, connection options and short list screening criteria.
- Submitters generally supported a lower discount rate and longer calculation period; and the principle that additional and unquantified benefits could be considered in the evaluation of development plans.
- Submitters considered that, under the counterfactual, renewable generation development would face higher curtailment risk, reduced scale and viability, project delays and wider economic and property and land use impacts.
- Submitters raised concerns with the Transmission Pricing Methodology (TPM).

Submitters supported continued engagement as the investigation moves to the short list consultation stage, particularly on preferred connection approaches, project timing, cost estimates, staging triggers, alternative funding options and the practical implications of different development pathways.

Please feel free to contact us at grid.investments@transpower.co.nz if you have any questions or further feedback.

¹ The consultation, the non-confidential submissions and this document are available at [Tararua enabling new renewables MCP - long list consultation | Transpower](#)

2 Submissions received

We received fourteen submissions on our long list consultation from generators, electricity distributors, major consumers and regional groups and public agencies.

Generators

- **Contact Energy** – a major electricity generator and retailer with interests in renewable generation development and transmission investment outcomes.
- **Genesis Energy** – a major electricity generator and retailer with generation development interests relevant to the regional transmission investigation.
- **Harmony Energy New Zealand** – a renewable generation developer with interests in solar and battery energy storage projects relevant to the regional transmission investigation.
- **Kākārīki Renewables** – a renewable generation developer with interests in renewable generation development and transmission connection outcomes.
- **Meridian Energy** – a major electricity generator and retailer, and developer of renewable generation projects in the Tararua and Wairarapa region.
- **NZ Clean Energy** – a renewable generation developer with interests in solar, battery energy storage and grid connection outcomes in the region.

Electricity Distribution Businesses (EDBs)

- **Powerco** – the electricity distribution network operator serving the Wairarapa and Tararua region.
- **Unison Networks and Centralines** – consumer-owned electricity distribution businesses serving communities in Hawke’s Bay, Taupō, Rotorua and Central Hawke’s Bay.

Major consumers

- **Fonterra Co-operative Group** – a major electricity consumer, New Zealand’s largest exporter and a major supplier of dairy products to the domestic market.
- **Major Electricity Users’ Group** – an association representing the interests of large industrial and commercial electricity users.

Regional groups and public agencies

- **Central Economic Development Agency** – the economic development agency for the Manawatū region.
- **Invest New Zealand** – an organisation with an interest in renewable investment opportunities and the transmission settings that support them.
- **Manawatū-Whanganui Lifelines Advisory Group** – part of Manawatū-Whanganui Emergency Management Group to promote readiness to respond in emergencies.
- **Tararua District Council** – the territorial authority for the Tararua district, with an interest in regional development, infrastructure planning and renewable energy opportunities.

3 Transpower's responses to submissions

We summarise our received submissions below and welcome the opportunity to incorporate this feedback into our Tararua Enabling Renewables MCP, the preparation of a short list of options and the underlying system analysis and economic modelling.

3.1 The need for investment

Submitters agree with the identified need for investment and support a coordinated regional approach. Transpower's work to future proof the grid for increased generation and decarbonisation via electrification of customer loads is supported. The potential unlocking effect for regional and national economic opportunities is acknowledged by various submitters.

The existing 110 kV network cannot support larger amounts of new renewable generation in the Tararua and Wairarapa region. It is noted that there is vastly more renewable generation in the Transpower connection framework proposed than there is capacity available in the 110 kV network.

Developers have identified this region as particularly attractive for renewable generation investment. One submitter particularly supports a core enabling investment in a new 220 kV line between Bunnythorpe and Woodville. Bunnythorpe substation is seen as the most relevant location to connect the regional generation to the core grid with sufficient capacity.

It seems likely that a level of core enabling investment (such as a new Bunnythorpe–Woodville 220 kV line) could be justified now. However, other upgrades may be better assessed incrementally or in stages, as the shape and timing of development becomes clear.

One submitter elaborates on a staged development pathway that prioritises targeted 110 kV upgrades, protection enhancements and non-transmission solutions (NTS) in the near term, while retaining and actively evaluating a 220 kV pathway connecting the Tararua region with Hawke's Bay as a future, trigger-based option.

One submitter notes that upgrades to the existing 110 kV network, and the addition of 220 kV connection and interconnection assets in the region, will be required to unlock new capacity and strengthen the local and national energy system and wider economy. A specific staging proposal would be: Bunnythorpe–Woodville 110 kV reconductoring and Waipawa reconfiguration first; new 220 kV Bunnythorpe–Woodville; then Woodville–Mangamaire and Woodville–Dannevirke with generation spurs; then Dannevirke–Waipawa–Fernhill/Redclyffe; finally, Mangamaire–Masterton/Haywards.

Submitters asked Transpower to distinguish clearly between core enabling investments and broader optional upgrades, and to test whether higher-cost options, particularly cable options, are likely to be economic before carrying them forward to the short list.

Submitters also noted that we need to move our grid investment at pace to ensure New Zealanders benefit from efficient generation choices, and timely grid connections for new load that supports Aotearoa's economy.

Anticipatory investment is seen as essential to electrifying New Zealand's economy and supports both new renewable generation and growing electricity demand.

A submitter states that the widely reported '\$250m stalemate' on Wairarapa wind shows that without coordinated, anticipatory investment, no individual project can rationally underwrite the shared assets, and that anticipatory investment is cheaper than piecemeal connection.

Transpower response:

We welcome the broad support of our approach and the Tararua Enabling Renewables MCP. Towards the short list consultation, we will analyse the potential unlocking effect of grid investments on generation investments and provide quantitative modelling of the economics. We will also consider the mentioned investment pathways with regards to staging, prioritised initial investments, and longer-term options like a 220 kV connection between Tararua and Hawke's Bay.

3.2 Why the Tararua and Wairarapa region is prioritised in this MCP

One submitter notes that the Tararua and Wairarapa region is one of Aotearoa New Zealand's most significant renewable generation opportunities with very high wind capacity factors. Developers have identified this region as particularly attractive for renewable generation investment.

Another submitter mentions the forecast demand increase across New Zealand, requiring increased supply and grid capacity. As such, they support all efforts to increase grid capacity in advance via enabling investments.

Transpower's ongoing work on Te Kanapu, the future grid blueprint, is also mentioned. Submitters see that this robust nation-wide programme of insight should enable both Transpower and its stakeholders to understand where anticipatory investment should first be made, bringing the highest benefits. There is significant wind and solar resource in the Tararua region, but it is unclear to some respondents if this may be better to progress first over other regions without seeing the grid blueprint first.

Another submitter is supportive of the overall direction of the MCP, but their view is that there is a strong need for robust system-level analysis. Transpower should demonstrate that the preferred pathway is efficient at a whole-of-system level, not just locally.

Similarly, submitters consider that there should be an objective assessment of the full set of anticipatory investment options to ensure the right projects are progressed and why this project is prioritised over others. Anticipatory investments in regions that deliver diverse renewable generation should be prioritised.

Given the anticipatory nature of the investment, some note that the Investment Test should be applied on a whole-of-system, pathway basis, capturing not only regional capacity benefits but also national resilience, transfer capability and long-term system efficiency. Submitters highlighted the need for robust whole-of-system analysis, including power-flow modelling, utilisation testing, resilience and route diversity benefits, system strength and stability impacts, and assurance that investment does not simply move constraints elsewhere.

Submitters are aware of strong private sector and generator investment announced in new generation projects in the Tararua region, in both wind and solar. There is also increasing potential at different demand locations for the use and supply of electricity, from consumer households and businesses to the future potential and need for electricity storage.

Transpower response:

We acknowledge the supportive submissions confirming our view on the high potential for wind and solar generation development in the region, in terms of both resource potential and practical considerations. We also acknowledge the questions around prioritisation of the Tararua region and respective grid investments over other potential regions. Given the strong generation potential within

the region, this MCP investigation will evaluate if enabling investment in this region can be justified. While other regions on face value may display similar opportunities, Tararua was chosen due to the scale of consented generation, the fact that those consents are held by multiple developers and the heavy weighting of potential projects in the region towards generation, as opposed to demand. We will also consider ongoing work and assumptions from the Te Kanapu initiative and the future grid blueprint as appropriate.

3.3 Generation developments

In the consultation document we asked for feedback regarding our generation assumptions and the provided list of known generation developments in the Tararua and Wairarapa region. Submitters generally confirmed our assumptions, and pointed out potential longer-term developments, either additional projects or capacity extensions of existing projects.

Submitters provided further information on generation projects, timing and connection dependencies, including evidence that transmission capacity and certainty could influence project scale, timing, connection approach and final investment decisions.

A generation developer considers there to be a high volume of 'constructable' wind potential throughout the Tararua and Wairarapa region, that is not reflected in current development pipelines. There is a potential further 1.3 GW of such capacity estimated.

Another developer highlights that the Waipawa solar cluster (Ongaonga, Central Hawke's Bay) can credibly host more than 1 GW of solar: high-quality solar resource (Hawke's Bay is among New Zealand's strongest solar regions), extensive lower-productivity land (soil classes that limit intensive agriculture) with flat, contiguous parcels close to the Waipawa substation.

One submitter considers that there should be an objective assessment of the full set of anticipatory investment options to ensure the right projects are progressed. They encourage looking deeper than announced generation projects as developers typically only announce projects that have a viable grid connection solution. Information about potential generation (and demand) projects that are not currently being progressed due to a lack of transmission capacity should be gathered and used in the investigation.

Transpower response:

We appreciate the detailed feedback on generation developments, confirming that our provided overview of existing projects captures what is in the public domain, but not some potential early-stage projects. We will consider further potential long-term developments in our more ambitious scenarios to determine what needs to be true to unlock these generation projects, and how large-scale grid upgrades could support these.

3.4 Demand and generation assumptions

Submitters generally support Transpower's proposed demand assumptions. While some note the necessary testing of the assumptions to ensure that these are realistic and not overstated, others note that the demand forecast appears skewed low. One submitter mentions interest of customers in increasing electrification and large load development in the wider region. The need case should

incorporate the demand-side transformation underway in the region, not only generation export (e.g., RETA Manawatū-Whanganui, Transport electrification and Te Utanganui).

They note that Transpower must transparently and consistently translate national assumptions into regional generation and demand forecasts, but what is missing from Transpower's grid planning is a list of high quality (diversified) renewable generation projects that can be enabled by transmission investment. For example, they note that there are at least 1,000 MW of high-quality wind sites in the upper North Island and more in the lower South Island that can be enabled by transmission upgrades, and that these would deliver valuable diverse generation.

One submitter notes that if the area was deemed a renewable energy zone, this would encourage greater local and international interest from national and international companies – similar to what Datagrid is doing in Southland.

Powerco as one of the regional electricity distributors provided details of their expected step load increases and embedded generation projects.

Transpower response:

We appreciate the support for our proposed demand and generation assumptions and the additional details provided. We will provide greater clarity on our approach for developing regional generation expansion plans in the short list consultation and update our demand forecast if new information becomes available. We will also revise the capital cost assumptions for new build generation.

We note that the given 'earliest commissioning year' value in table 5 of attachment 2 is a modelling parameter and does not necessarily represent a likely commissioning year. When analysing potential generation expansion plans, we will consider the provided feedback to get to realistic expansion plans with more ambitious variations.

3.5 Screening criteria and preferred connection

In terms of criteria for assessing grid development plans, one submitter asks to check if the investment unlocks incremental generation or demand that does not have an alternative viable path to market. Also, the impact on wholesale electricity prices should be considered. They state that the assessment of anticipatory investments should take the impact of generation diversity, and the resulting impact on delivered electricity costs into account. They note that intermittent generation that is highly correlated to existing wind farms or solar farms, might be of relatively low value to the system.

Submitters note that future flexibility, staging and scalability are relevant considerations as well as time to deliver. NTS could be deployed in the interim period until the transmission option is delivered. However, it is mentioned that NTS are likely limited to marginal support at best, due to the scale of the requirements.

Specific suggestions received for new transmission options and generation connections include new 220 kV lines from Bunnythorpe or Woodville to enable large-scale wind projects in the Tararua region. Some view it as likely that a level of core enabling investment (such as a new Bunnythorpe–Woodville 220 kV line) can be justified now. However, other upgrades may be better assessed incrementally or in stages, as the shape and timing of development becomes clear.

Suggestions also included that a staged 220 kV development south to Haywards (Wellington) and/or north to Whakatu (Hawke's Bay) should be considered. As an interim upgrade, due to the expected long construction time for a new 220 kV line, reconductoring of the 110 kV Woodville–Dannevirke–

Waipawa corridor has been suggested. Also, the 110 kV Masterton–Greytown–Upper Hutt corridor should be considered.

Another submitter supports the proposed upgrades to the existing 110 kV network, and the addition of 220 kV connection and interconnection assets in the region as both will be required to unlock new capacity and strengthen the local and national energy system and wider economy. They suggest that the potential reconfiguration of the Waipawa substation to allow power flow between Woodville and Fernhill/ Redclyffe in Hawke’s Bay should be considered early.

One submitter is not supportive of the underground cabling options in the long list, as it does not currently appear likely that the benefits of these options would exceed the high costs. Also, the choice between existing-site upgrades and new GIPs could have significant implications for total cost, outage complexity and duration (impacting both existing and future generation), future expandability, land and footprint constraints, and could limit the flexibility of future generation connection arrangements.

Transpower response:

We appreciate the detailed feedback on the grid development and connection options. We will review all mentioned options and considerations in our upcoming analysis of regional grid development plans as part of the MCP short list process. We may reach out directly as needed to customers whose ongoing connection enquiries could be impacted by the potential development plans. All options or development plans will undergo a detailed cost-benefit analysis to identify a preferred option.

3.6 Discount rate and calculation period

EDBs and generators generally supported the use of input assumptions that depart from the default values set out in Transpower’s Capex Input Methodologies (IM).

Whole-of-system Investment Test

One EDB submitted that, given the anticipatory nature of the investment, the Investment Test should be applied on a whole-of-system basis rather than through the standard approach typically used for reactive network upgrades investments. The submitter considered that integrated development pathways should be assessed in the context of the wider system, including the additional benefits described in Section 3.8.

Extended calculation period

Generators expressed similar views, supporting the use of more ambitious input assumptions where appropriate, including a lower discount rate and an extended calculation period. They submitted that the calculation period should better reflect the long lives of both renewable generation and transmission assets, noting that many of the benefits from coordinated 220 kV investments would emerge progressively over several decades as generators connect and renewable capacity increases.

3% discount rate

Most generator submitters supported a 3% discount rate for the following reasons:

- to better recognise long-term economic and societal benefits of the long-lived infrastructure that enables decarbonisation;
- to better reflect the costs of under-investment in enabling infrastructure, which they considered could exceed the cost of building capacity ahead of need; and

- investment in transmission infrastructure can deliver wider benefits for Aotearoa New Zealand's businesses and communities that are difficult to reflect in financial modelling. Using a lower discount rate can help recognise some of these benefits.

However, submitters also raised concerns towards a lower discount rate of 3%. One generator submitted that the implication of a 3% discount rate on the TPM allocations was unclear. Another submitter noted that the choice of discount rate can materially influence investment outcomes and recommended that the implications of adopting a lower rate be clearly explained.

Transpower response:

We appreciate the feedback on the potential application of a lower discount rate and longer calculation period given the nature of the anticipatory investment. We recognise the concerns for deviations from the Capex IM default values, and we will clearly state our rationale for the approach we ultimately select.

3.7 Base case/counterfactual

Only generators commented on the counterfactual (the existing transmission network without new grid investments). Some generators indicated they were comfortable with Transpower determining an appropriate counterfactual. Other submitters provided more details on their committed projects that are approaching Final Investment Decision (FID) and would therefore proceed based on the existing transmission network.

Impacts on generation development

Several generators submitted that, without coordinated 220 kV transmission grid investments, the existing transmission network would:

- expose existing and future generation projects to higher curtailment risk;
- limit future generation projects to materially smaller developments;
- reduce the economic viability of future generation projects;
- delay project development, as FIDs would need to align with piecemeal transmission connections; and
- result in capital being deployed later, elsewhere in New Zealand, or overseas.

Wider impacts

One submitter suggested the counterfactual should also assume piecemeal transmission connections could require additional easements and create greater landowner impacts; and the region and New Zealand may lose the opportunity to retain existing energy intensive industries and attract new ones if there is an actual or perceived lack of coordination or commitment to unlock renewable energy resources and strengthen the electricity infrastructure.

Transpower response:

We appreciate the feedback on the counterfactual. We will consider this feedback as we refine our assumptions and the power system modelling to reflect the likely impacts of a scenario without coordinated grid investments on generation developments in the region.

3.8 Other quantified or unquantified benefits

Generators, EDBs and public agencies identified a range of benefits that they considered may not be fully captured through a conventional Investment Test.

Resilience and security of supply benefits

- **Dry year resilience:** additional renewable generation diversity and greater transmission capacity could reduce exposure to dry hydro years, improve security of supply and reduce reliance on HVDC transfers from the South Island.
- **System resilience:** a stronger transmission network could improve security of supply and the ability to respond to outages and unexpected events. One submitter noted that greater consideration should be given to Hawke's Bay security of supply, noting that high-impact low probability transmission failures could have significant welfare and civil defence consequences.

Market efficiency benefits

- **Reduced curtailment:** additional transmission capacity could reduce renewable generation curtailment.
- **Coordination benefits:** shared transmission infrastructure could be more efficient than building separate connections for each project. One generator submitted that a coordinated 220 kV backbone could support a further 1-2 GW of renewable generation at a lower incremental cost than successive 110 kV upgrades.
- **Competition benefits:** some generators submitted that coordinated transmission development could improve competition and support more efficient development outcomes over time.

Renewable development benefits

- **Project timing:** transmission investment could allow generation projects to proceed earlier than otherwise possible.
- **Investor confidence:** greater certainty around future transmission capacity and timing could support investment decisions.
- **Future expansion:** transmission investment could provide optionality for future renewable expansion.
- **Electrification:** earlier renewable generation development could support growing electricity demand from electrification.

Wider economic benefits

- **Regional economic development:** transmission investment could support regional growth, employment and associated economic activity.
- **National emissions reductions:** additional renewable generation could support Aotearoa New Zealand's decarbonisation goals.
- **Generation diversity:** enabling generation in different locations and technologies could improve the diversity of the generation mix.

Submitters also emphasised that any unquantified benefits should be transparently described and appropriately bounded to avoid overstating their contribution to the investment case.

Transpower response:

We appreciate the recommendation and feedback on the additional economic benefits. We will assess whether these benefits can be quantified as part of the short list consultation analysis. Where benefits

cannot be quantified, we will consider whether they should be included as unquantified benefits and provide explanations on how they have been considered in the assessment.

3.9 Transmission Pricing Methodology concerns

Generators, EDBs, and major consumers raised concerns about cost allocation, the TPM process and alternative funding arrangements.

Cost allocations

Submitters considered that:

- the Investment Test should include whole-of-system benefits, and the cost allocation framework should therefore reflect the wider beneficiary base, rather than socialising costs to existing regional load;
- generation enabling transmission investments benefit all consumers and should not be funded predominantly by load customer in the region;
- the current TPM could allocate a significant share of the cost of anticipatory investments on consumers of the day, rather than future generators and consumers who may benefit from the investment. The current TPM does not enable costs to be shared between current and future parties; and
- existing consumers should be protected from paying too early for materially anticipatory investments.

One EDB submitted that their support for any future 220 kV regional investment is conditional on strong cost allocation discipline, including:

- credible evidence of generation uptake and timing;
- recognition of resilience, diversity, and whole-of-system benefits; and
- clear demonstration that the larger investment is more efficient than repeated incremental upgrades.

TPM process and alternative funding

Submitters raised the following points:

- the current TPM is a barrier to anticipatory transmission investments;
- alternative funding and delivery models should be considered to accelerate investment and reduce costs; and
- one submitter also raised concerns about the risk of overbuilding capacity too early, and they advocate for anticipatory investment to be funded by the Government until the capacity is utilised.

Transpower response:

We appreciate the feedback regarding the allocation of costs for anticipatory interconnection investments. We acknowledge that, under the current TPM, the costs of anticipatory interconnection investments would primarily be allocated to existing load customers.

We also recognise the concerns raised by respondents regarding this outcome. As stakeholders may be aware, Transpower is considering the allocation of costs for anticipatory interconnection assets as part of the TPM Operational Review.

We appreciate the alternative funding and delivery models suggested by respondents. Transpower encourages stakeholders to engage in the TPM Operational Review regarding the allocation of costs for anticipatory interconnection assets.

