



TRANSPOWER

HVDC Link Upgrade Programme Major Capex Proposal (Stage 1)

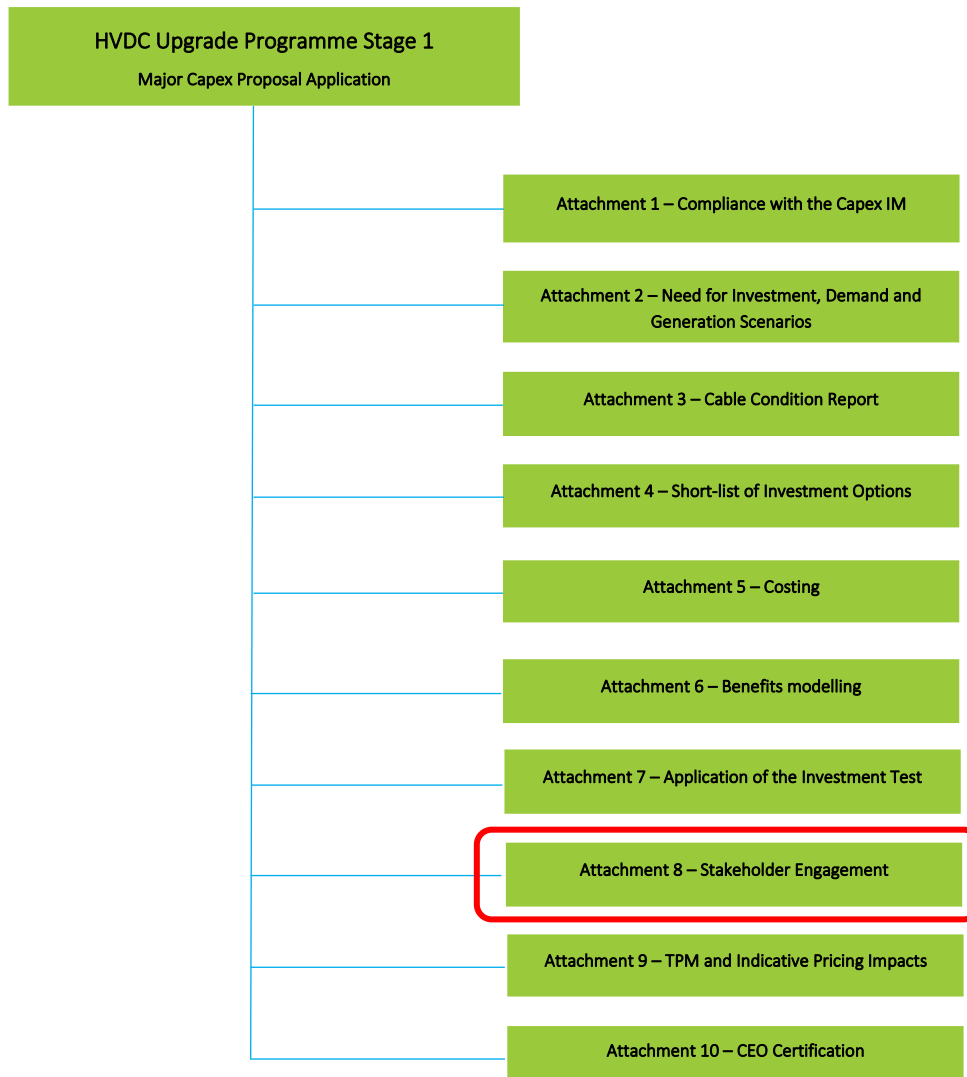
Attachment 8: Stakeholder engagement

September 2025



Purpose

This attachment summarises our consultation efforts on this project and outlines how stakeholder feedback has been incorporated throughout the development of this proposal. The document is a supporting attachment to the HVDC Upgrade Programme Stage 1 Major Capex Proposal (**MCP**). It should be read in conjunction with our main proposal.



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1 Stakeholder engagement overview

The HVDC link has been the subject of several recent consultations aimed at gathering input from our customers and stakeholders on its future role in New Zealand's electricity system. These consultations have focused on the HVDC link's future importance, cable condition, and potential capacity upgrades.

Date	Activity
December 2022	NZGP1.1 major capex proposal (including improvements and upgrades to the HVDC link) submitted to the Commerce Commission (following stakeholder consultation)
March 2024	Examining the purpose and future role of our HVDC link discussion paper
August 2024	HVDC cable replacement and enhancement consultation document
May 2025	Consultation on short list of investment options

In Transpower's letter of intention¹ to the Commerce Commission to plan this major capex project, and their reply² to Transpower, it was agreed:

- that it is reasonable to exclude the long-list consultation (as described in Schedule I of the Capex IM) and to proceed directly to the short-list consultation in accordance with clause 8.1.3(2)(b) of the Capex IM,
- that NTS would not be considered as investment options in the investigation as it is considered that NTS are unlikely to provide a viable alternative to retaining an operational HVDC link between the North and South Island electricity networks.

An overview of feedback received during the earlier consultations, including feedback following our short list consultation can be found in the following sections.

¹ [Transpower Notice of Intention to plan the HVDC Link Upgrade Programme major capex project - April 2025](#)

² [Commerce Commission reply to Transpower's Notice of Intention - May 2025](#)

2 Examining the purpose and future role of our HVDC link

In March 2024 Transpower published a discussion paper entitled *Examining the purpose and future role of our HVDC link* (the consultation paper).³ As custodians of the High Voltage Direct Current (HVDC) inter-island link, Transpower published this paper to inform all stakeholders of the challenges and opportunities we face in ensuring the link remains fit-for-purpose given Aotearoa New Zealand's goal of achieving net zero carbon by 2050.

This discussion paper sought stakeholder input on the long-term role of the HVDC link. It discussed the challenges and opportunities associated with maintaining a fit-for-purpose HVDC link in line with increased electrification and forecast renewable energy generation. The submission period was from 7 March 2024 until 30 June 2024.

Submissions were received from:

- Pan Pac Forest Products Ltd (Pan Pac), which is a forest products company that includes forestry operations, manufacturing and sales of wood pulp and lumber products. They are a large electricity user,
- The Major Electricity Users' Group (MEUG), which is a trade association representing major electricity users,
- Transpower, as the System Operator, is responsible for managing the real time operation of the New Zealand electricity system,
- Two private individuals who are interested in the project.

Following the consultation, we published a summary of submissions along with our responses to the matters raised.⁴

In summary, there was universal agreement in the submissions about the importance of the HVDC link and an interest in future modelling to understand the benefits and trade-offs of future investment decisions. Key points raised by submissions:

- The future importance of the HVDC interisland link in New Zealand's electricity system and enabling access to lower cost renewable energy from the South Island;
- The HVDC's importance for the power system, including its availability and capacity to transfer energy and instantaneous reserves between the North Island and South Island;
- The HVDC facilitates greater integration of renewable electricity generation from the South Island to enter the market which should encourage a shift toward greater electrification, which is essential for achieving New Zealand's net zero targets;
- To support discussions on the future of the HVDC, comprehensive modelling of the potential future benefits of the various HVDC link options would help stakeholders better understand the costs and benefits of various investment options.

³ [Discussion paper - Examining the purpose and future role of our HVDC link - March 2024](#)

⁴ [HVDC Discussion Paper - Summary of Submissions July 2024](#)

3 HVDC cable replacement and enhancement consultation

In August 2024 Transpower released a consultation document regarding the replacement of the HVDC cables by the early 2030s, as well as the potential capacity increase from 1200 MW to 1400 MW.⁵

This consultation document and complementary webinar⁶ addressed the need to begin planning for the replacement of the submarine cables. The consultation period was between 6 August 2024 and 23 August 2024.

Submissions were received from the following eight organisations:

- Mercury NZ Limited (Mercury) - an electricity generator and multi-product utility retailer of electricity, gas, broadband and mobile telephone services,
- Contact Energy Limited (Contact) - an electricity generator, a wholesaler of natural gas, and a retailer of electricity, natural gas, broadband and LPG,
- Meridian Energy (Meridian) – an electricity generator and retailer,
- Neptune Power Ltd (Neptune) - a company exploring the use of the unique tidal flow of the Karori Rip in Cook Strait as a sustainable electricity source,
- Orion New Zealand Limited (Orion) - an electricity distribution company, based in Christchurch,
- Electricity Networks Aotearoa (ENA) - an organisation representing all the power lines companies that deliver electricity across Aotearoa,
- The Major Electricity Users Group (MEUG) - a trade association representing major electricity users,
- Transpower, in its role as system operator (System Operator) who co-ordinates electricity supply and demand in real time, in a manner that avoids fluctuations in frequency and disruption of supply.

We also received submissions from eleven interested individuals acting in their private capacity. Copies of the full submissions are available at the link referred to in footnote 3.

Stakeholders broadly supported replacing the cables by the early 2030s to minimise failure risks. There was also broad agreement on taking this opportunity to examine increasing the capacity to 1400 MW during the replacement process, recognising the significant costs and long lead times associated with later upgrades. We are limited to an increase to 1400 MW as further increases beyond 1400 MW are not possible without extensive upgrades to the rest of the HVDC link which are not cost effective.

There was also support for Transpower acting now and planning to meet that deadline. There was general agreement with our view that without timely replacement of the cables the worst-case scenario for New Zealand consumers would be to lose the HVDC link due to end-of-life factors and to then have an extended period without service due to the repair or replacement timeframes.

Submissions, particularly from Meridian and Contact, noted the importance of further evaluation of costs and benefits of this capacity increase. This evaluation will be critical for

⁵ [HVDC cable replacement and enhancement August 2024 consultation | Transpower](#)

⁶ Available at [HVDC link upgrade programme - short-list consultation | Transpower](#)

any investment decisions by Transpower and for the Commerce Commission's decision on any major capex proposal. They expressed interest in the evaluation of costs and benefits and information provided in future consultations.

For a detailed summary of submissions, please refer to our summary of submissions document.⁷

4 Major Capex Proposal Short list consultation

In May 2025, Transpower consulted on a short-list of options and our preliminary application of the Investment Test for the HVDC Upgrade Programme. The submission period was open from 7 May 2025 to 20 June 2025.⁸

We received submissions from eight organisations and one individual, representing a broad cross-section of the electricity sector, including generators, distributors, major industrial users, and policy bodies.

Submissions were received from:

- Vector – the electricity distributor for greater Auckland region,
- Meridian Energy (Meridian) – a major electricity generator and retailer,
- Fonterra – a significant industrial electricity consumer, operating multiple dairy processing facilities across the country,
- Electricity Engineers' Association (EEA) – a key industry organisation representing the electricity supply sector,
- Business Energy Council (BEC) – a cross sector energy forum focused on promoting informed energy policy and dialogue,
- Electricity Networks Aotearoa (ENA) – the industry associating representing electricity distribution businesses in New Zealand,
- Infrastructure New Zealand (INZ) – a body representing public and private sector Infrastructure stakeholders,
- Contact Energy (Contact) – a major electricity generator and retailer,
- The Major Electricity Users Group (MEUG) - a trade association representing major electricity users,
- Transpower (as System Operator) – providing a submission in its regulated role as System Operator, distinct from its role as Grid Owner,
- New Zealand Steel (NZ Steel) – a major electricity consumer operating energy-intensive manufacturing facilities.

We also received a submission from Logan Fenton in their private capacity.

⁷ Read a [summary of the HVDC link cable upgrade and enhancement summary of submissions - September 2024](#)

⁸ [HVDC link upgrade programme short-list consultation - Summary of submissions July 2025](#)

Following the consultation, we published a summary of submissions along with our responses.⁹

Feedback received during the short-list consultation has been incorporated throughout this proposal where relevant. Key themes included:

- The majority of stakeholders strongly support the need for HVDC investment to maintain system reliability, support decarbonisation, and meet future demand;
- Option 3 (1400 MW capacity via four cables), which is our preferred option, received widespread support as the best solution;
- There was support for bundling related HVDC upgrades to minimise outages and maximise efficiency;
- Stakeholders expressed no concerns with our treatment of non-transmission solutions in the short-list consultation, and no alternative solutions were proposed;
- Agreement that Option 3 (1400 MW) offers the greatest net benefit to consumers;
- Confidence in the robustness of Option 3 under sensitivity analysis.

Specific feedback included:

- Vector proposed a staged approach to cable installation to preserve option value. While Transpower had earlier assessed this variant, it was excluded due to higher costs, procurement risks, and reduced net benefits. We have included more detail regarding our decisions to not short-list this variant (Attachment 4, section 2.1);
- Fonterra noted that Transpower's scenario weighting may underestimate electrification, particularly due to industrial decarbonisation. They recommended revising some specific assumptions to reflect an earlier decommissioning of cogeneration plants. We have retained a balanced weighting of the four scenarios we have used. Our sensitivity analysis shows that the Option 3 remains robust under higher growth assumptions;
- NZ Steel questioned the need to remove decommissioned cables due to the high cost. We have decided not to seek approval for cable removal in this MCP Stage 1 and will consider it as part of a future stage;
- Submitters requested more clarity on transmission pricing and Benefit-Based Investment (BBI) charges. We have provided further information and estimated charges as part of this MCP (Attachment 9).

No feedback was received that required change to our application of the Investment Test.

⁹ A full summary of submissions is available in our [Short-list summary of submissions](#) document.

