



TRANSPower

Transpower Customer Webinar

March 2026

Opening **Karakia**

Kia tau te rangimarie
O te Rangi e tū iho nei
O Papatūānuku e takoto nei
O te taiao e awhi nei
Ki runga i a tātou
Tihei Mauri ora

Translation

Let the peace
of the sky above us
of the earth laid out here
and of the all-embracing universe
settle upon us
Breathe the breath of life

Topic	Presenter	Time
Welcome, agenda and karakia	Head of Customer & Commercial, Tim Duguid	1.30pm
New executives at Transpower	Head of Customer & Commercial, Tim Duguid	1.32pm
Customer connections update	Customer Connections Project Director, Rupert Holbrook	1.35pm
Update: TPM Operational Review	Head of Grid Pricing, Victoria Parker Senior Regulatory Advisor – Grid Pricing, Karen Smith	1.45pm
Assumptions Book Update	Grid Investment Modelling Manager Hunter Humphries and Principal Grid Investment Modeller, Steve Torrens	1.55pm
News from Te Kanapu	Programme Director – Future Grid, Tania Lund	2.05pm
Questions and discussion	All presenters	2.20pm
Ngā mihi e karakia		2.30pm



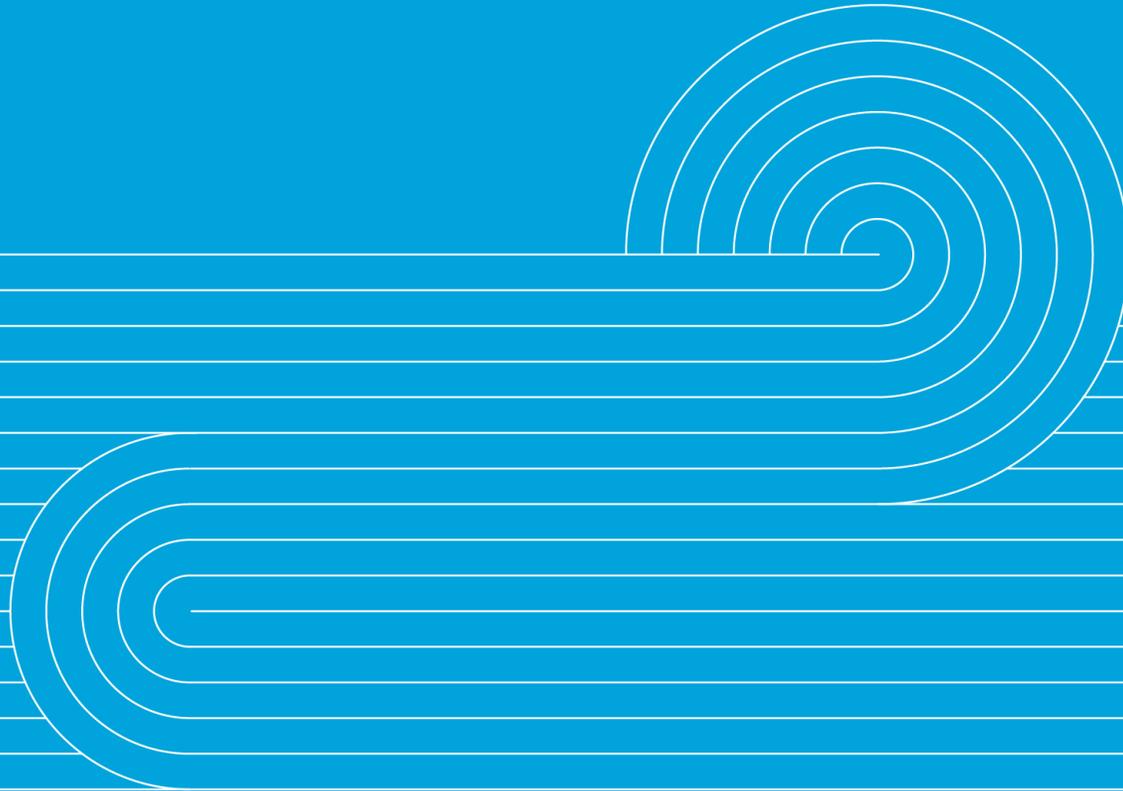
Introducing our new execs

- Greg Smith, Chief Financial Officer
- Louise Griffin, Executive General Manager External Affairs



Customer connections update

Rupert Holbrook, Customer Connections Project Director



Connection Pipeline – March 2026

(Generation and energy storage)

Total pipeline = 92 projects (24,407 MW)



Mar 2025



Notes

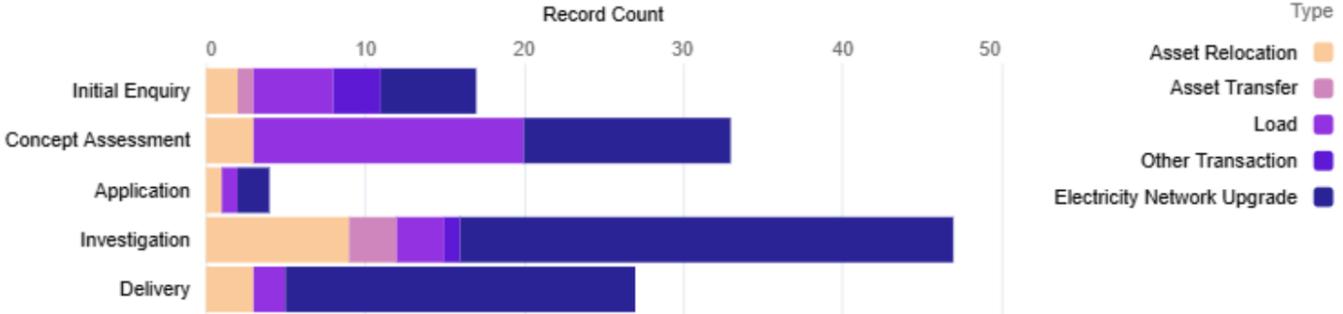
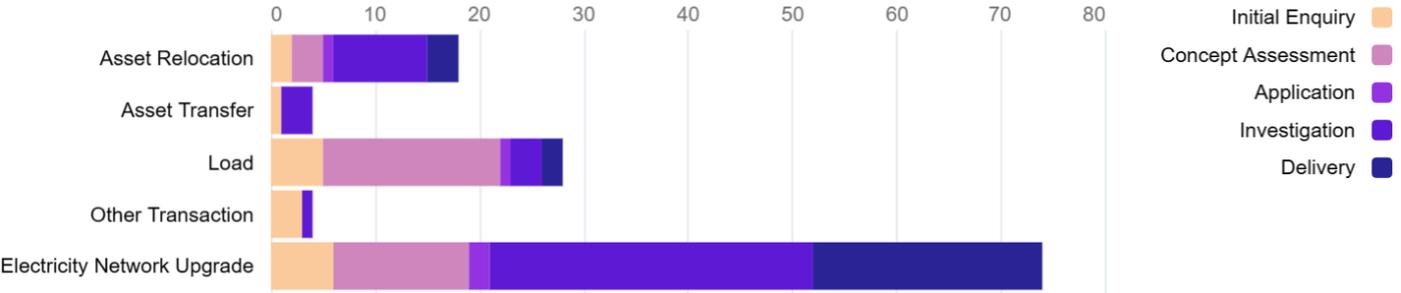


Following an update to Transpower's customer management tools during October 2025, stage counts still show the number of Transpower connections, while generation and storage technologies are now tracked individually, so technology counts represent the number of technologies connecting. Each connection may have more than one technology, e.g. Solar + BESS.

Number of projects includes those currently on hold at the customer's request (17 in investigation, one in delivery).

Connection Pipeline March 2026

Projects – count (and MW) by stage and by technology (load, transmission and other)



Stage ↑	Type ↑	Sum of Max MW	Record Count
Initial Enquiry	Asset Relocation	0	2
	Asset Transfer	0	1
	Load	360	5
	Other Transaction	0	3
	Electricity Network Upgrade	230	6
Concept Assessment	Asset Relocation	0	3
	Load	962	17
	Electricity Network Upgrade	625	13
Application	Asset Relocation	0	1
	Load	200	1
	Electricity Network Upgrade	240	2
Investigation	Asset Relocation	30	9
	Asset Transfer	0	3
	Load	780	3
	Other Transaction	0	1
	Electricity Network Upgrade	2k	31
Delivery	Asset Relocation	0	3
	Load	200	2
	Electricity Network Upgrade	650	22

New 'Ready to proceed' flag

Region	Connection location (substation or circuit)	Max MW	Connection voltage	Technology	Transpower stage	Sequence number	Ready to proceed ?	Status		Estimated date to progress to investigation
Otago-Southland	NSY_ROX-1	220	220	Solar	Application	1	Y	Confirmed	Application Expected	Apr/2026
Otago-Southland	NSY_ROX-1	220	220	BESS	Application	1	Y	Confirmed	Application Expected	
Otago-Southland	ROX_ISL	310	220	Solar	Application	2	Y	Confirmed	Application Expected	Apr/2026
Otago-Southland	ROX_ISL	310	220	BESS	Application	2	Y	Confirmed	Application Expected	
South-Canterbury	ROX_TWZ	400	220	Solar	Application	3	Y	Confirmed	Application Expected	May/2026
South-Canterbury	ROX_TWZ	400	220	BESS	Application	3	Y	Confirmed	Application Expected	
Canterbury	ISL_KIK	600	220	Solar	Application	4		Confirmed	Application Expected	May/2026
Canterbury	ISL_KIK	600	220	BESS	Application	4		Confirmed	Application Expected	
Central North Island	BPE_TKU 1_2	400	220	Wind - Onshore	Application	5	Y	Confirmed	Application Expected	Jun/2026
Central North Island	NAP-OKI-2	150	220	Solar	Application	6	Y	Confirmed	Application Expected	Jun/2026
Central North Island	NAP-OKI-2	150	220	BESS	Application	6	Y	Confirmed	Application Expected	
Auckland	Glenbrook	280	33	BESS	Application	7		Confirmed	Application Expected	Jul/2027
Otago-Southland	Edendale	259	110	Wind - Onshore	Application	8		Confirmed	Application Expected	Jul/2026
Canterbury	ISL_KIK	200	220	Solar	Application	9		Confirmed	Application Expected	Jul/2026
Canterbury	ISL_KIK	200	220	BESS	Application	9		Confirmed	Application Expected	
Canterbury	ISL_KIK	310	220	Solar	Application	10		Confirmed	Application Expected	Aug/2026
Canterbury	ISL_KIK	310	220	BESS	Application	10		Confirmed	Application Expected	
Taranaki	BRK-SFD-A	200	220	Wind - Onshore	Application	11		Confirmed	Application Expected	Aug/2026
Central North Island	WDW_BPE (220) / MST_M	300	220	Wind - Onshore	Application	12	Y	Confirmed	Consent Granted	Sept/2026
Waikato	WKM_WRK	120	220	Geothermal	Application	13	Y	Confirmed	Application Expected	Sept/2026
Waikato	WKM_WRK	80	220	Solar	Application	13	Y	Confirmed	Application Expected	
Waikato	Whakamaru / Atiamuri	350	220	Wind - Onshore	Application	14		Confirmed	Application Expected	Sept/2026
Canterbury	ISL_KIK_A/B	500	220	Solar	Application	15	Y	Confirmed	Application Expected	Oct/2026
Canterbury	ISL_KIK_A/B	200	220	BESS	Application	15	Y	Confirmed	Application Expected	
Northland	Maungatapere	150	110	BESS	Application	16	Y	Confirmed	Application Expected	Oct/2026
Waikato	Hamilton	200	110	BESS	Application	17	Y	Confirmed	Application Expected	Nov/2026
Waikato	Hamilton	200	110	BESS	Application	17		Confirmed	Application Expected	
South-Canterbury	ISL-TKB-1, TKB	250	220	Solar	Application	18		Confirmed	Application Expected	Nov/2025
Otago-Southland	Gore Substation	140	110	Solar	Application	19		Accepted	Application Expected	Dec/2026
Bay of Plenty	Kaitemako-Tarukenga-1	454	220	Wind - Onshore	Application	20		Received	Application Expected	Feb/2027
Central North Island	Linton	230	220	Wind - Onshore	Application	21		Confirmed	Application Submitted	Feb/2027

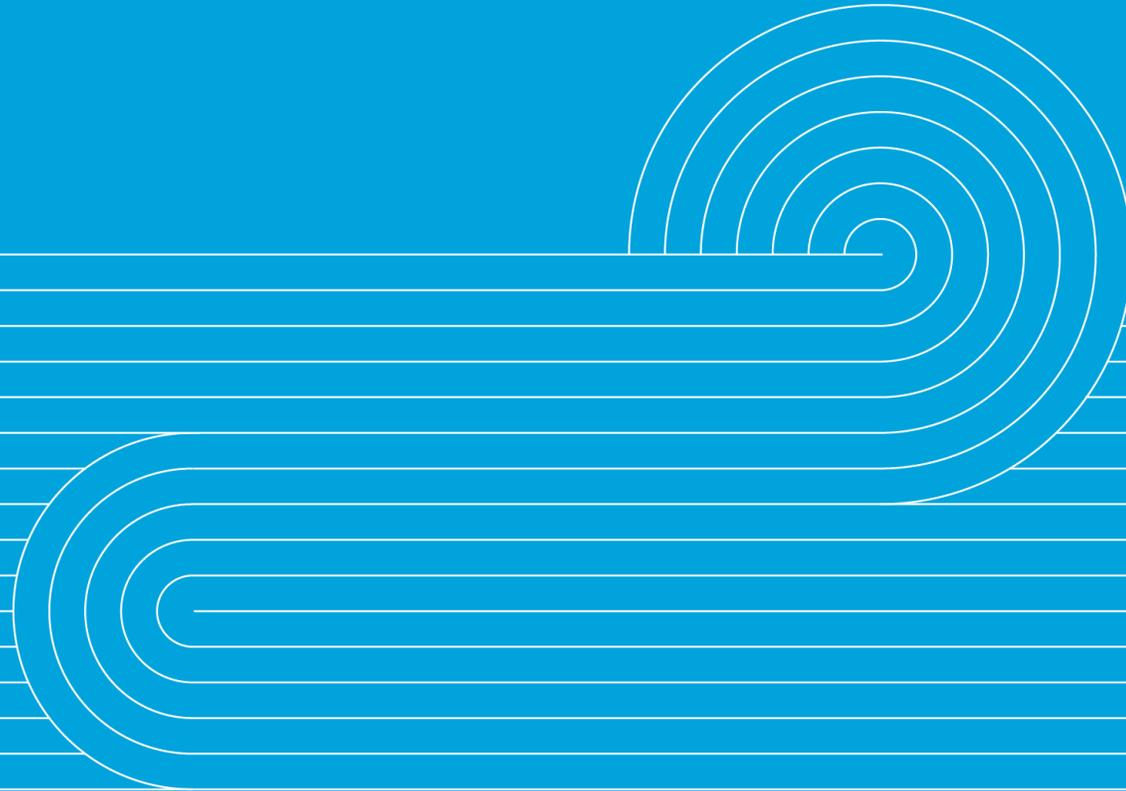
- Applications are deemed ready to proceed to investigation where Transpower has had confirmation the applicant: is ready to sign the associated services agreement; has FID for the residual application fee and the investigation costs; maintains a need date which justifies an investigation in the near term; and has no impediments to securing property rights and consenting.
- Developers are required to be 'ready to proceed' three months ahead of the 'estimated date to progress to investigation'.

Additional data on generation commissioning

Generation commissioning										
Customer	Generator name	Region	Connection location	Net new capacity M	TP Connection voltage	Technology	Transpower / EDF	Transpower connection practical completion date	First sync date	Generation commissioning date
Todd Generation	JRD - Junction Road G71	Taranaki	Junction Rd	52	110	Gas	Transpower	N/A	1/02/2020	15/05/2020
Todd Generation	JRD - Junction Road G72	Taranaki	Junction Rd	52	110	Gas	Transpower	N/A	1/02/2020	15/05/2020
Mercury	WPP - Waipipi Wind Farm	Taranaki	Waverly	130	110	Wind	Transpower	5/04/2020	13/11/2020	31/03/2021
Ngawha	NGB - Ngawha B (New)	Northland	Top Energy - Kaikohe	32	110	Geothermal	Top Energy	N/A	19/12/2020	27/01/2021
Mercury	TUR - Turitea North	Central North Island	Linton	118	220	Wind	Transpower	19/10/2020	14/07/2021	20/12/2021
Mercury	TUR - Turitea South (New)	Central North Island	Linton	100	220	Wind	Transpower	N/A	20/03/2023	15/06/2023
Mercury	KWD - Kaiwera Downs (New)	Otago Southland	PowerNet - Gore	41	33	Solar	PowerNet	23/06/2023	21/08/2023	15/11/2023
New Power	RHO - Rotohiko (Final New)	Waikato	WEL Networks - Huntly	33	33	BESS	WEL Networks	N/A	1/11/2023	11/12/2023
Meridian	HRP - Harapaki Wind Farm	Hawkes Bay	Harapaki	172.9	220	Wind	Transpower	12/06/2023	13/11/2023	24/07/2024
Lodestone Energy	KTS - Kaitaia Solar Farm	Northland	Top Energy - Kaikohe	23.7	110	Solar	Top Energy	N/A	17/11/2023	2/02/2024
Lodestone Energy	RGT - Rangitaiki Solar Farm (New)	Bay of Plenty	Horizon - Edgecumbe	23.7	33	Solar	Horizon Networks	N/A	6/03/2024	17/04/2024
Contact Energy	TAB - Tauhara Station	Central North Island	Tauhara	184	220	Geothermal	Transpower	25/10/2023	23/04/2024	15/05/2024
Contact Energy	TAC - Te Huka 3	Central North Island	Unison - Wairaki / Tauhara	51.4	33	Geothermal	Unison	N/A	1/10/2024	16/12/2024
Genesis Energy	LAU - Lauriston Solar Farm	South Canterbury	Electricity Ashburton - Ashburton	52	66	Solar	Electricity Ashburton	N/A	11/11/2024	10/02/2025
Northpower	RWI - Ruawai Solar Farm	Northland	Northpower - Mangaturoto	14	33	Solar	Northpower	N/A	9/12/2024	19/12/2024
Manawa Energy	COL - Coleridge runback scheme	Canterbury	Coleridge	0	66	Hydro	Transpower	31/10/2024	N/A	N/A
Lodestone Energy	HTR - Te Herenga O Te Ra Solar Farm	Bay of Plenty	Waiotahe	22.8	33	Solar	Transpower	21/11/2024	6/01/2025	25/07/2025
Meridian Energy	RUK - Ruakākā BESS	Northland	Bream Bay	100	33	BESS	Transpower	9/12/2024	16/01/2025	31/05/2025
Aquila	PSF - Pukenui Solar Farm	Northland	Top Energy - Kaikohe	17.16	110	Solar	Top Energy	N/A	22/05/2025	16/06/2025
Eastland Generation	KAW - Te Ahi O Maui Upgrade	Bay of Plenty	Kawerau	0	220	Geothermal	Transpower	18/09/2025	22/09/2025	22/09/2025
New Power	TOH - Taiohi Solar Farm	Waikato	WEL Networks - Huntly	22.4	33	Solar	WEL Networks	N/A	6/10/2025	12/12/2025
Lodestone Energy	WTA - Whitianga Solar Farm	Waikato	Powerco - Kopu	23.75	33	Solar	Powerco	N/A	24/11/2025	17/12/2025
Eastland Generation	KAW - TOPP 2	Bay of Plenty	Kawerau	55	220	Geothermal	Transpower	18/09/2025	3/12/2025	23/12/2025
Mercury	NTM - Ngā Tamariki OEC5	Central North Island	Nga Awa Purua	56.87	220	Geothermal	Transpower	N/A	16/01/2026	30/01/2026
Rānui Generation	TRS - Twin Rivers Solar Farm (Stage 3)	Northland	Top Energy - Kaikohe	24	110	Solar	Top Energy	N/A	27/01/2026	11/02/2026
Horizon Energy	EDS - Edgecumbe Solar Farm	Bay of Plenty	Horizon - Edgecumbe	27	33	Solar	Horizon Networks	1/03/2025	TBA	TBA
Project Waiotahe LP (Aquila)	Waiotahe Solar Farm	Bay of Plenty	Waiotahe	33	33	Solar	Transpower	15/04/2025	TBA	TBA
Harmony Energy	TAH - Tauhei Solar Farm	Waikato	Waihou	150	110	Solar	Transpower	17/06/2025	TBA	TBA
Genesis Energy Limited	Huntly BESS	Waikato	Huntly	100	220	BESS	Transpower	31/07/2025	TBA	TBA
Mercury	KPO - Karapiro runback scheme	Waikato	Karapiro	16	110	Hydro	Transpower	1/09/2025	N/A	N/A
Top Energy	KOE-MPE 110kV Runback SPS	Northland	Top Energy - Kaikohe	50	110	Geothermal / Solar	Transpower	19/12/2025	N/A	N/A
Contact Energy Limited	Glenbrook BESS I	Auckland	Glenbrook	100	33	BESS	Transpower	6/03/2026	9/03/2026	TBA

Update: TPM Operational Review

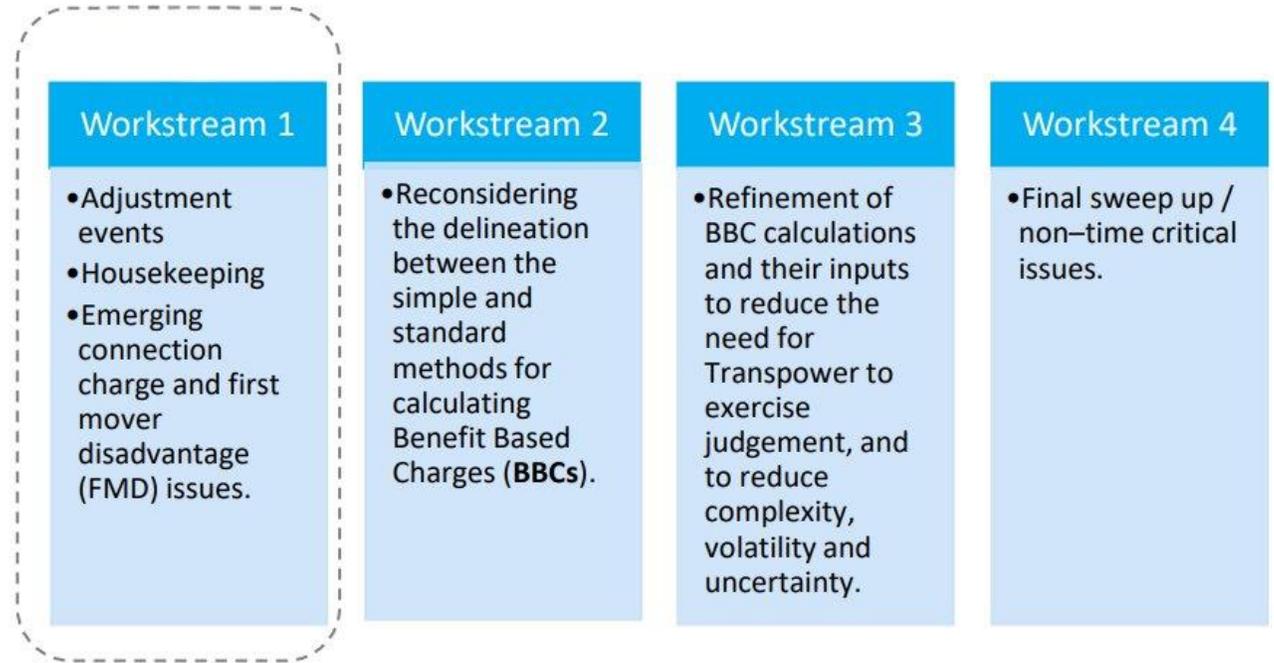
Victoria Parker, Head of Grid Pricing
Karen Smith, Senior Regulatory Advisor – Grid Pricing



Introduction to the Operational Review

Purpose

- Ensure the TPM continues to meet its intended objectives and customers can easily understand and manage their transmission charges.
- Since we introduced the Authority's new TPM in 2023, we've listened to feedback from customers and investors about how it could work better, particularly around reducing uncertainty, volatility, and complexity.
- The Operational Review aims to improve the TPM's implementation, addressing potential issues identified by stakeholders and Transpower since its introduction.
- We are undertaking the Operational Review under an initial four 'workstreams'. At the end of each workstream, Transpower will form its final views on any issues identified
- We are submitting our workstream 1 proposal to the Authority early April.



Consultation focus

- These are operational, not policy changes
- Stakeholder views sought on options, preferences, and impacts





Workstream 1 consultation & next steps

- Our workstream 1 consultation closed on 20 March 2026
- We received 13 submissions
- We are reviewing the submissions and plan to publish them, along with a summary, on Friday
- We will submit our workstream 1 proposal to the Authority in early April
- Issues and options analysis for workstreams 2 & 3 (Benefit-based charges) starts in April
- IWG to test issues and ideas
- Workstreams 2 & 3 consultation paper/s will be published in late 2026

Other Grid Pricing updates & consultations

- New “Learning pages” are live on our website (links on our homepage: [Grid Pricing | Transpower](#)) – these provide TPM guidance based on customer type
- Submissions on our NZGP1 consultation on updated proposed benefit-based investment (BBI) allocations are due on 8 April, with cross submissions to follow, if needed
- Consultation on updated Assumptions Book planned for April – Hunter and Steve to provide more details in the next section
- Sign up to our TPM newsletter for updates on the Operational Review and other Grid Pricing updates

Learning pages



Electricity distribution business
(EDB)



Electricity generator



Directly connected load consumer



Battery owner





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Assumptions Book update

Transmission Pricing Methodology Benefit-based
Charge Assumption Book

Hunter Humphries, Grid Investment Modelling Manager
Steve Torrens, Principal Grid Investment Modeller, Steve Torrens

March 2026



What is the Assumptions Book?

- Contains detailed **assumptions** and **methodologies** Transpower intends to apply when calculating transmission charges (specifically benefit-based transmission charges or BBCs).
- Includes modelling input assumptions, which are also used when analysing the economics of upgrades to the grid, for example in applying the Investment Test for Major Capex Projects.



Why are we updating it?

- It's important that we keep the Assumptions Book up to date, as we must apply these assumptions to BBI allocation modelling undertaken under the TPM. This has implications for customer BBCs.
- While we can deviate from the assumptions book, all deviations must be listed, and the list will continue to grow if the assumptions book stays out of date.
- The TPM Operational Review will look at BBCs and how they are calculated. However, any changes will need to go through the appropriate regulatory processes before being reflected in future modelling and charges.



What are we updating?

- **In scope:**
 - modelling inputs
 - minor changes and clarifications to some methodologies
- **Out of scope:**
 - substantive changes that may be progressed through the TPM Operational Review
 - demand forecast inputs, methodologies or results – these are project-specific



What do the changes entail?

- **Modelling input assumptions have been updated to:**
 - move to using MBIE's 2024 Electricity Demand and Generation Scenarios (EDGS), supply side assumptions, as the basis for the assumptions
 - incorporate more up-to-date information, such as the updated generation stack information produced by BECA/Concept as part of our Te Kanapu project
 - account for significant developments and announcements in the energy sector, for example the LNG import terminal and Huntly Firming Options



Next steps

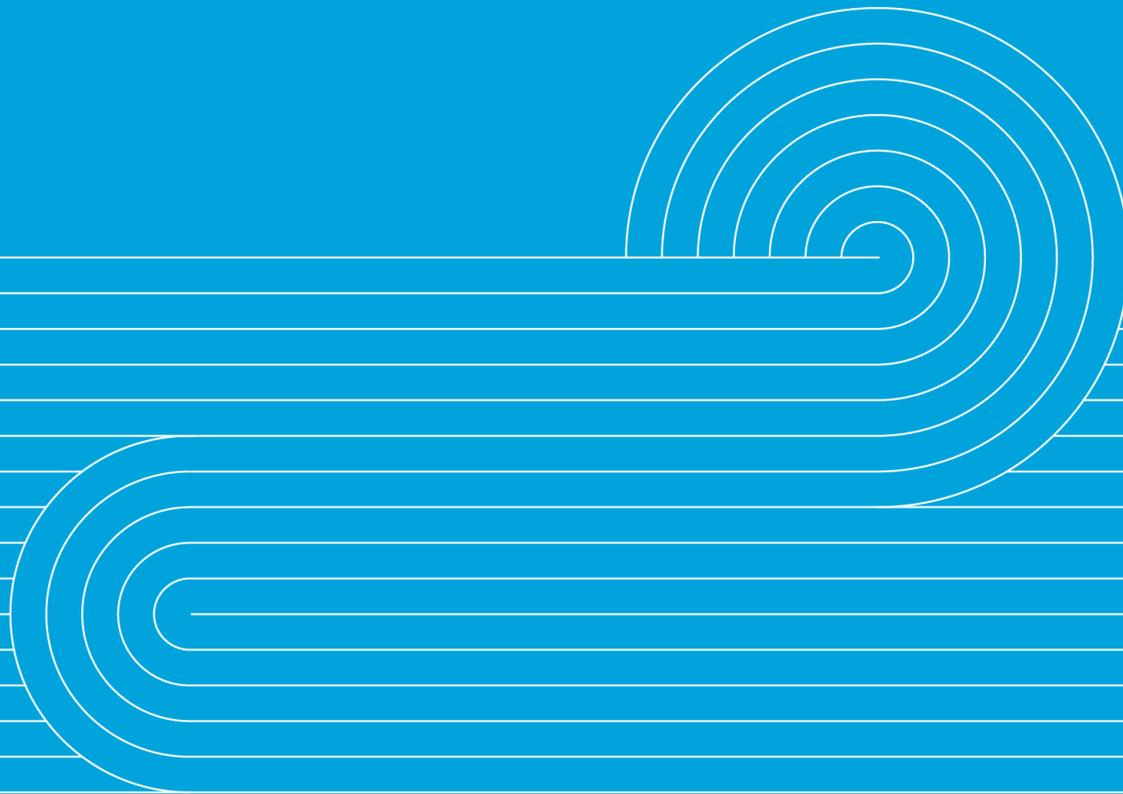
- Updates to the Assumptions Book will be consulted on in April
- If there is enough interest, we will hold a focused workshop about the content of the consultation
- If you are interested in attending a workshop, please email us at Grid.Investments@transpower.co.nz
- Questions?





News from Te Kanapu

Tania Lund, Programme Director – Future Grid





TRANSPOWER

Te Kanapu

Customer webinar
26 March 2026



Developing a
future grid
blueprint for
Aotearoa

How we are developing Te Kanapu future grid blueprint

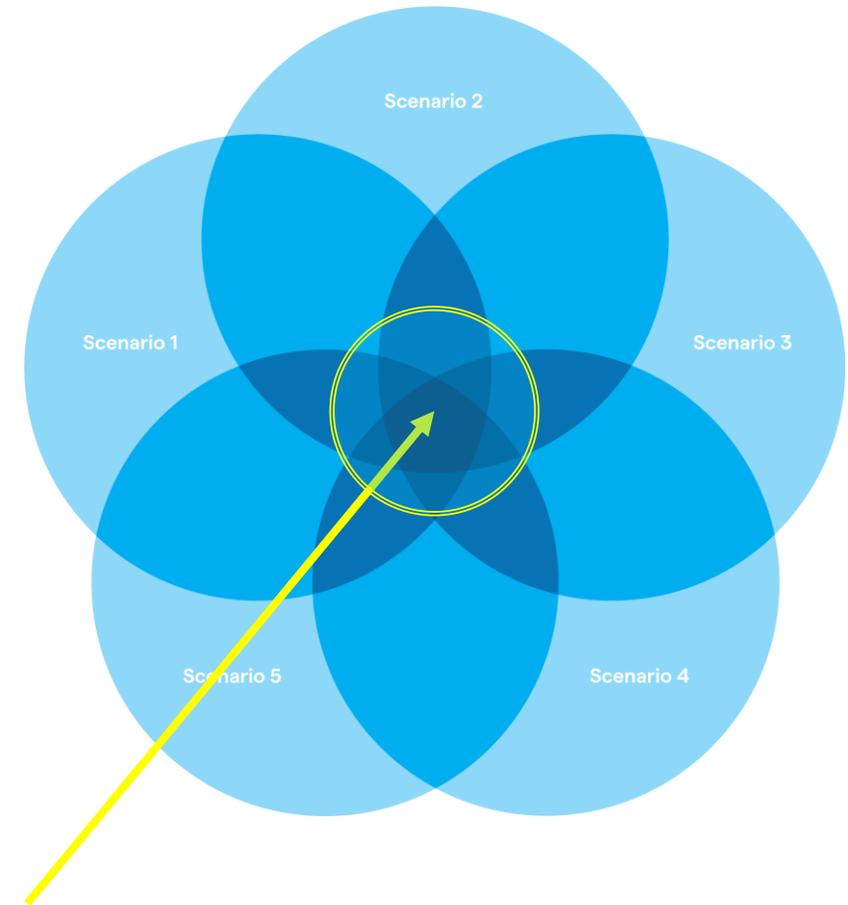
Objective – to develop a Grid Blueprint looking out to 2050.

Approach – evidence base to support investment in transmission as a key enabler of economic growth and electrification. Wide engagement and consultation to inform our work, build support and increase sector social performance.

Process – stakeholder insights inform our work throughout, broader discussions on how Aotearoa grows, consideration of wider benefits. This is our first grid blueprint but not the last.

Output – show a low regrets pathway across our scenarios, identify the major transmission upgrades needed in most cases in the mid-2030s and early 2040s.

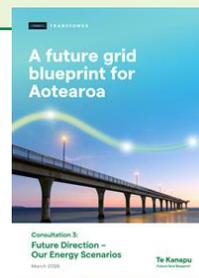
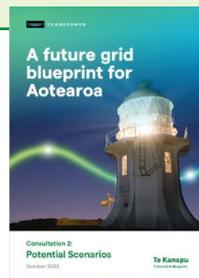
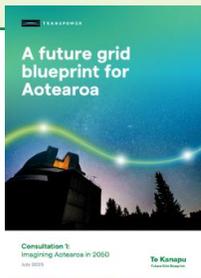
Outcome – evidence base that supports the case for regulatory reform and policy changes needed to enable timely investment. Stakeholder clarity on Transpower's long term investments, platform for improved coordination and collaboration.



The way New Zealand uses electricity is changing. We need a Goldilocks Grid – the next steps that are "just right" for a thriving economy.

Our timeline to develop the grid blueprint

<p>1</p> <p>Imagining Aotearoa in 2050</p>	<p>2</p> <p>Potential scenarios</p>	<p>3</p> <p>Technical approach</p>	<p>4</p> <p>Future direction</p>	<p>5</p> <p>Draft grid blueprint</p>	<p>6</p> <p>Te Kanapu future grid blueprint</p>
<p>July 2025</p>	<p>October 2025</p>	<p>December 2025</p>	<p>March 2026</p>	<p>Later in 2026</p>	<p>Later in 2026</p>
<p>Gathering views on the future of Aotearoa in 2050</p>	<p>Draft scenarios, load & generation</p>	<p>Draft methodology, potential investment options</p>	<p>Finalised scenarios, generation mix, key assumptions</p>	<p>Combining insights, research, inc. least-regrets investment</p>	<p>We'll publish our first grid blueprint</p>



Differing assumptions around the local and global context led to five different scenarios

Patchwork Nation	Aotearoa Electrified	Global Green Rush	Made in Aotearoa	Aotearoa Intelligence
No clear strategy	Emissions reduction	Emissions reduction	Traditional strengths	New economy
<p>In a world of sluggish growth and unclear direction, Aotearoa makes do with what it has. Communities, businesses, and industries rely on creativity, adaptability, and practicality to keep the economy moving.</p>	<p>In a world where global priorities shift with each electoral cycle, NZ chooses a steady, long-term path towards a low-carbon economy. By committing to a consistent strategy, the country leads by example, reducing emissions where possible and building enduring relationships. NZ demonstrates that small nations can punch above their weight by staying the course and embodying the change they want to see in the world.</p>	<p>Global coordination towards reducing emissions accelerates, driving down the cost of clean technologies and improving efficiency worldwide. NZ rides this momentum, finding its path to net-zero made cheaper and easier. By leveraging international advances and aligning with global action, NZ achieves deep emissions reductions while strengthening key sectors of our economy, such as manufacturing, transport, and farming.</p>	<p>A large expansion of goods production across the primary and manufacturing sectors drives growth. Aotearoa has historically been a strong producer of key products, especially food. This scenario explores the advantage gained from producing more high-value, clean, green products for the world. Global warming is tracking towards 2°C by 2100.</p>	<p>A pivot toward digitalisation and artificial intelligence (AI) where NZ leverages its strong advantage for data centres, given its highly renewable electricity system and low air temperatures. The country targets growth in high-tech sectors, such as creative industries, healthcare, space, and services. Its population grows as more people choose to live here in a perceived haven.</p>

Stakeholder feedback informed our final scenarios – 160+ submissions received

What we heard from stakeholders	How we updated our scenarios
We are not competitive with other countries; growth has been low. We are not attractive to large industries, closures will continue.	All our scenarios assume GDP growth; those with higher growth require policy shifts to occur as enablers.
Data centres are a bubble, NZ not attractive to data centre developers. Data centre demand is too optimistic.	Data centre forecasts now much lower across all scenarios. We have used recent report by NZ Tech. One large data centre in the 2030s is retained in Aotearoa Intelligence.
Local production of sustainable aviation and e-fuels will be too expensive and is unlikely. We will continue to import aviation and marine fuels.	Fundamentally reset our assumptions on manufacturing e-fuels. Only significant production occurs in Made in Aotearoa ramping up from 2035.
EV uptake in has dropped and slow to recover since removal subsidies. Worldwide EV adoption is faltering.	We now assume a slower uptake of EVs, our 2050 uptake is now close to that we predicted originally in 2040. It includes lower demand due to more mode shift – public transport, walking, etc.
NZ Gas sector decline will happen/is happening much faster than expected. Alternatives are electricity or biofuels for existing industries.	Process heat electricity demand now up to 25% higher in scenarios with existing industries and industrial growth. Global Green Rush and Made in Aotearoa.

Comparison of demand increase pre- and post-consultation

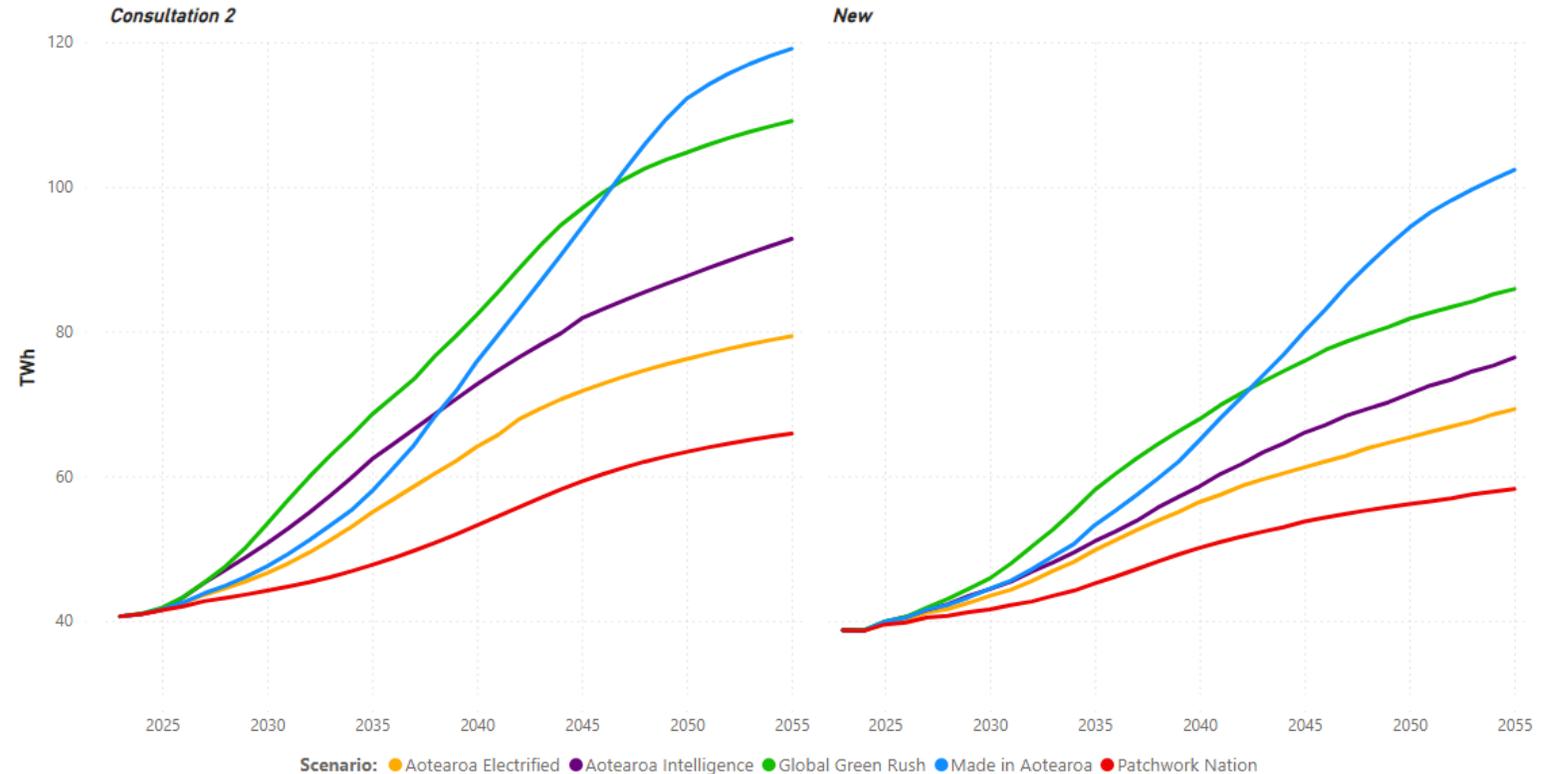
Major changes following stakeholder feedback:

Less eFuel production – SAF & eMethanol only in Made in Aotearoa. Assume it would be cheaper to import it.

Slower EV uptake in all scenarios – based on current local and international trends.

Lower Data Centre demand and uptake – referenced to NZ Tech report.

Comparison of electricity demand by scenario in TWh

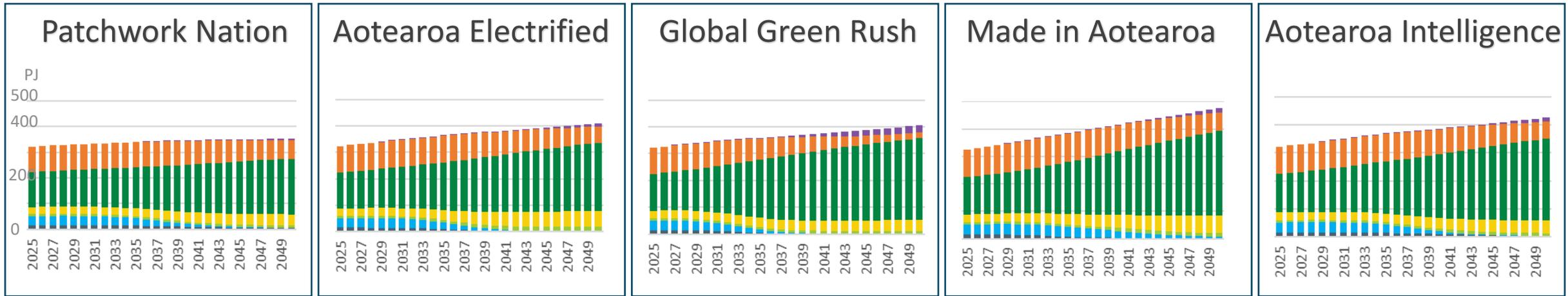


Stakeholder engagement is a key pillar of our Te Kanapu initiative. In moderating our draft scenarios, we have prioritised stakeholder views above the risk of under scoping growth scenarios.

Growth and the energy transition vary between scenarios.

Electricity demand growth is driven by both!

- eFuels
- Oil products
- Electricity
- Biomass
- Renewables
- Natural gas
- Solid fuels



Energy growth

9.8% growth by 2050 [0.4% CAGR]	27% growth by 2050 [1.0% CAGR]	26% growth by 2050 [0.9% CAGR]	46% growth by 2050 [1.5% CAGR]	32% growth by 2050 [1.1% CAGR]
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Electricity (42% of the mix in 2025), grow to:

61% of the mix by 2050	62% of the mix by 2050	75% of the mix by 2050	65% of the mix by 2050	69% of the mix by 2050
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Biofuels (9% of the mix in 2025), grow to:

12% of the mix by 2050	15% of the mix by 2050	10% of the mix by 2050	14% of the mix by 2050	11% of the mix by 2050
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Thank you for your time – your feedback is important

Consultation on Future Direction - Our Energy Scenarios is open now until March 30th, 2026.

Read our consultation document and provide feedback:



For more information, or to
arrange a follow up
conversation:

feedback@transpower.co.nz



A future grid blueprint for Aotearoa



Consultation 3:
Future Direction –
Our Energy Scenarios

March 2026

Te Kanapu
Future Grid Blueprint



Questions

[TRANSPower.CO.NZ](https://www.transpower.co.nz)





Thank you

Next webinar: Thursday 14 May

TRANSPower.CO.NZ

Closing **Karakia**

Unuhia, unuhia,
Unuhia ki te uru tapu nui
Kia wātea, kia māmā, te ngākau,
Te tinana, te wairua, i te ara tangata
Koia rā e Rongo, whakairia ake ki runga
Kia tina! Tina! Hui e! Tāiki e!

Translation

Draw on, draw on
draw on the supreme sacredness
to clear, to free the heart,
the body and spirit of humankind
That is Rongo suspended high above us
Draw together! Affirm!

