Submission by Transpower New Zealand Limited

Mackenzie District Plan: Proposed Plan Changes 28, 29 and 30, Variations, and Designations

21 January 2025

Keeping the energy flowing




TRANSPOWER

Transpower New Zealand Limited The National Grid

Form 5

Submission on notified proposal for policy statement or plan, change or variation

Clause 6 of Schedule 1, Resource Management Act 1991

To Mackenzie District Council ("the Council")

Name of submitter: Transpower New Zealand Limited ("Transpower")

This is a submission on the following proposed plan ("the proposal"):

Mackenzie District Plan ("District Plan") – Proposed Plan Changes 28, 29 and 30, Variations, and Designations

Transpower could not gain an advantage in trade competition through this submission.

The specific provisions of the proposal that my submission relates to are:

The Proposed Plan Changes in its entirety insofar as it relates to the National Grid, and particularly the extent to which the provisions of the Proposed Plan Changes, Variations and Designations give effect to the National Policy Statement on Electricity Transmission 2008 ("NPSET"). A copy of the NPSET is attached as Appendix C.

The specific details of Transpower's submission, and decisions sought in relation to the provisions of the Proposed Plan Changes, Variations and Designations are set out in detail in the Table at Appendix A.

Transpower's submission is:

The National Grid is nationally (and regionally) significant infrastructure that is recognised in the Resource Management Act 1991 ("RMA") context by the NPSET; the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 ("NESETA") and the Canterbury Regional Policy Statement 2013 ("CRPS")[1].

Appendix B describes the National Grid, including Transpower's assets in Mackenzie District along with the statutory framework that is relevant to the Plan Changes, Variations and Designations as it is relevant to the National Grid.

The Proposed Plan Changes, Variations are required, amongst other things, to:

(a) give effect to the provisions of the NPSET and CRPS; and

(b) not be in conflict with, nor duplicate, the provisions of the NESETA;

(c) represent the most appropriate means of exercising Council's functions having regard to the efficiency and effectiveness of the provisions relative to other means;

(d) discharge Council's duty under section 32 of the RMA; and ultimately

(e) achieve the purpose of the RMA.

In addition, Transpower's submission notes the Schedule 1 (Clause 4) of the RMA requirement to include designations in the District Plan and supports the retention of these designations, subject to a correction to the legal description in respect of one designation.

It is Transpower's submission that the relevant provisions of the Proposed Plan Changes, Variations and Designations generally achieve the statutory requirements set out above (insofar as is necessary in respect of

[1] As published in July 2021 to include Change 1 to Chapter 6.

the scope of the Proposed Plan Changes, Variations and Designations), subject to limited further amendments to the relevant provisions.

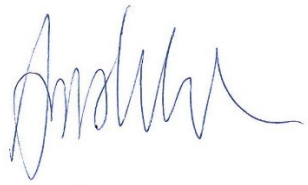
This submission outlines those provisions that Transpower supports and also sets out limited amendments to the Proposed Plan Changes, Variations and Designations that are necessary to meet the relevant statutory requirements.

Transpower seeks the following decision from the local authority:

Amend the Proposed Plan Changes, Variations and Designations to make all required changes, including the specific amendments set out in the Table at **Appendix A**, and such further alternative or consequential relief as may be necessary to fully give effect to this submission.

Transpower wishes to be heard in support of its submission.

Due to the specific interests of Transpower, and particularly the national significance of the National Grid, Transpower will not consider presenting a joint case.



Signature of person authorised to sign
on behalf of Transpower New Zealand Limited

Date:	**22 January 2025**
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Appendix A: Transpower New Zealand Limited – Submission on Proposed Plan Changes 28, 29 and 30, Variations, and Designations: Mackenzie District Plan

The following table sets out the decisions sought by Transpower, including specific amendments to the provisions of the Proposed Plan Changes, Variations and Designations (shown in red double underline and double ~~red double strikethrough~~) and further reasons, in addition to those set out in the body of this submission (above), for Transpower's support for, or opposition to, the provisions.

Provision	Support/Oppose	Submission/Reasons	Decision Sought
PLAN CHANGE 28 – HAZARDS AND RISKS, HISTORIC HERITAGE AND NOTABLE TREES, AND VARIATIONS			
Definitions			
'critical infrastructure (in relation to Natural Hazards Chapter only)'	**Support**	Transpower supports the definition of 'critical infrastructure' to the extent that the definition is consistent with the CRPS and includes reference to the National Grid.	**Retain** the definition of critical infrastructure (in relation to Natural Hazards Chapter only)' as notified.
'natural hazard sensitive building'	**Support**	Transpower supports the definition of 'natural hazard sensitive building' on the basis that the definition excludes 'infrastructure' in a manner that is appropriate to the design, nature and role of that infrastructure.	**Retain** the definition of 'natural hazard sensitive building' as notified.
Contaminated Land			
Whole Chapter	**Support**	Transpower supports the approach taken to regulating the subdivision, use or development of contaminated land or potentially contaminated land through reliance on the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011. Transpower considers that this approach avoids unnecessary duplication and as such is efficient and effective.	**Retain** the Contaminated Land Chapter as notified.
Hazardous Substances			
Policies HAZS-P1 Storage and Use of Hazardous Substances	**Support**	Transpower supports Policy HAZS-P1 in the basis that the Policy directs the management of residual risk related to activities involving the use and storage of hazardous substances, as opposed to regulating the activity. Transpower considers that this approach appropriately manages the potential effects of	**Retain** Policy HAZS-P1 as notified.

Provision	Support/Oppose	Submission/Reasons	Decision Sought
		the use of hazardous substances and implements Objective HAZS-O1.	
Natural Hazards			
Objective NH-O1 Risk from Natural hazards	**Support in part**	Transpower generally supports Objective NH-O1 but, insofar as the Objective relates to the National Grid, is concerned that the outcome described by clause (1) is not sufficiently clear or certain. That is, the Objective directs that new National Grid assets avoid areas where risks are assessed an unacceptable. The linear nature of the National Grid, along with its operational and functional needs, means that avoiding areas is not always possible. Requiring 'avoidance' is more stringent than the direction for the management of effects in the NPSET and as such, does not give effect to the NPSET. Transpower considers that, for the National Grid, it is more appropriate that natural hazard risks are managed, rather than areas avoided.	**Amend** Objective NH-O1 as follows: ***"NH-O1 Risk from Natural hazards*** *New subdivision, land use and development:* *1. is avoided in areas where the risks from natural hazards to people, property and infrastructure are assessed as being unacceptable except where the National Grid has a functional need or operational need for its location and the risks from natural hazards are appropriately managed; and* *2. in all other areas, is undertaken in a manner that ensures that the risks of natural hazards to people, property and infrastructure are avoided or appropriately mitigated."*
Objective NH-O2 Critical Infrastructure and Specific Buildings in Natural Hazard Overlays	**Support**	Transpower supports Objective NH-O2 on the basis that clause (1) appropriately provides for critical infrastructure in Natural Hazard Overlays where that infrastructure is resilient to the effects of natural hazards. Transpower considers that the Objective appropriately acknowledges that characteristics of infrastructure, including its functional needs and operational needs, and the ability to design infrastructure to manage risks.	**Retain** Objective NH-O2(1) as notified.
Policy NH-P4 Flood Hazards	**Support in part**	Transpower supports clause (2) of Policy NH-P4 to the extent that the Policy provides for the operation, maintenance, repair, replacement, upgrading of critical infrastructure in the Flood Hazard Assessment Overlay Area. However, Transpower considers that the Policy fails to provide a policy pathway for new critical infrastructure in the Flood Hazard Assessment Overlay Area (as is the case for High Flood Hazard Areas in Policy NH-P5). The linear nature of the National Grid, along with its operational and functional needs, means that it is not possible for the National Grid to avoid locating in areas vulnerable to natural hazards. For instance, the National Grid must traverse rivers that generally run west to east in order to transmit electricity from south to north. Transpower considers it	**Amend** Policy NH-P4 as follows: ***"NH-P4 Flood Hazards*** *Within the Flood Hazard Assessment Overlay Area (except High Flood Hazard Areas)~~, enable~~:* *1. enable new non critical infrastructure, or the operation, maintenance, repair, replacement, upgrading of non critical infrastructure where the infrastructure does not increase flood risk on another site; and* *2. enable the operation, maintenance, repair, replacement, upgrading of critical infrastructure where the infrastructure does not increase flood risk on another site;*

Provision	Support/Oppose	Submission/Reasons	Decision Sought
		is necessary to provide a policy pathway to provide for new assets to transmit electricity through areas susceptible to natural hazards, including the Flood Hazard Assessment Overlay Area, in order to recognise the characteristics, and national significance, of the National Grid and to give effect to the enabling provisions of the NPSET.	*x. provide for new National Grid assets where there is an operational need or functional need to locate in that environment and where the assets do not increase flood risk on another site; and* *3. enable any other new subdivision, use and development only where every new natural hazard sensitive building has an appropriate floor level above the 500 year ARI design flood level."*
Policy NH-P5 High Flood Hazard Area	**Support in part**	Transpower supports Policy NH-P5 on the basis that the Policy appropriately provides a policy 'pathway' for new critical infrastructure in a High Flood Hazard Area in a manner that recognises the characteristics of such infrastructure (including its locational requirements and the ability for design to mitigate risk). That said, the Policy fails to include policy direction for the operation, maintenance, repair, replacement, upgrading of critical infrastructure in the same manner as Policy NH-P4. Transpower therefore seeks amendments to the Policy to achieve this and, insofar as it relates to the National Grid, give effect to Policies 1, 2 and 5 of the NPSET.	**Amend** Policy NH-P5 as follows: ***"NH-P5 High Flood Hazard Area*** *Within any High Flood Hazard Area ~~avoid any~~:* *x. enable the operation, maintenance, repair, replacement, upgrading of critical infrastructure where the infrastructure does not increase flood risk on surrounding properties;* *1. avoid any extensions to existing natural hazard sensitive buildings unless:* *a. minimum floor levels, as determined by a Flood Hazard Assessment are incorporated into the design of the development to ensure buildings are located above the flood level so that the risk to life and potential for property damage from flooding is mitigated;* *b. the risk to surrounding properties is not significantly increased; and* *c. the development is not likely to require new or upgraded public natural hazard mitigation works to be undertaken by a local authority.* *2. avoid any subdivision and new natural hazard sensitive buildings unless it is:* *a. not likely to result in loss of life or serious injuries; and* *b. not likely to suffer significant damage or loss; and* *c. not likely to require new or upgraded public natural hazard mitigation works to be undertaken by a local authority to mitigate or avoid the natural hazard; and* *d. not likely to exacerbate the effects of the natural hazard.* *3. avoid any subdivision unless it is:*

Provision	Support/Oppose	Submission/Reasons	Decision Sought
			a. managed to ensure land use enabled by subdivision does not result in an unacceptable risk to people and property that cannot be mitigated to an acceptable level. *4. avoid any new critical infrastructure unless:* *a. there is a functional need or operational need to locate in that environment; and* *b. the infrastructure is designed to be resilient to flood hazard as far as is practicable; and* *c. the infrastructure is designed so as not to increase flood risk to people and property."*
Policy NH-P7 Fault Hazard and NH-P8 Fault Hazard Risk to Critical Infrastructure and Specific Buildings	**Support in part**	Transpower generally supports Policies NH-P7 and NH-P8 but considers that the provisions do not provide clear direction in respect of the management of flood hazard risk for critical infrastructure. Transpower seeks minor refinements to the Policies so that the appropriate policy direction is clear.	**Amend** Policy NH-P7 as follows: ***"NH-P7 Fault Hazard*** *Subdivision, land use and development, other than critical infrastructure, is:* *1. managed in the Fault Hazard (Subdivision) Overlay to ensure land use enabled by subdivision does not result in an unacceptable risk to people and property; and* *2. avoided in the Ostler Fault Hazard Area Overlay if the subdivision, use or development increases risks associated with the surface fault rupture that cannot be mitigated to an acceptable level."* ***"NH-P8 Fault Hazard Risk to Critical Infrastructure and Specific Buildings*** *1. Critical Infrastructure only locate within the Fault Hazard (Critical Infrastructure) Overlay where:* *a. there is a functional need or operational need to locate in that environment; and* *b. the infrastructure is designed to be resilient to surface fault rupture hazard as far as is practicable.* *2. ~~Critical infrastructure, m~~Major hazard facilities, education facilities or visitor accommodation activities only locate within the Fault Hazard (Critical Infrastructure) Overlay where:*

Provision	Support/Oppose	Submission/Reasons	Decision Sought
			a. the building can be designed to manage the risks to people and property, and buildings on adjoining sites, to an acceptable level."
Rule NH-R4 New Critical Infrastructure	**Support**	Transpower supports Rule NH-R4 on the basis that the Rule, and accompanying matters of discretion, appropriately provide for new critical infrastructure in the Flood Hazard Assessment Overlay in a manner that, insofar as the Rule relates to the National Grid, gives effect to NPSET.	**Retain** Rule NH-R4 as notified.
Rule NH-R6 New critical infrastructure, major hazard facilities, education facilities and visitor accommodation activities or extensions to existing critical infrastructure and major hazard facilities, education facilities and visitor accommodation activities	**Support in part**	Transpower generally supports Rule NH-R6 to the extent that a consent pathway provided for new critical infrastructure in the Fault Hazard (Critical Infrastructure) Overlay. However, Transpower seeks a minor amendment to the Matters of Discretion to allow for a consideration of the benefits, or positive effects, of the activity in a manner that mirrors the Matters of Discretion in Rule NH-R4.	**Amend** the Matters of Discretion in Rule NH-R4 to include the following: "*x. Any positive effects from the proposal.*"
Notable Trees			
Rule TREE-R2 Pruning of a Notable Tree listed in TREE-SCHED1 for the Purpose of Maintaining Overhead Lines and Road Corridor Safety	**Support in part**	Transpower generally supports Rule TREE-R2 on the basis that the Rule provides for the operation and maintenance of the National Grid by enabling the trimming of notable trees that would otherwise pose a risk to the National Grid. Transpower seeks a limited amendments to the Rule to: • recognise that the work might be required for operation of transmission lines more generally (as opposed to for reasons of safety); • provide an exemption to the requirement to notify the Council where the tree presents an imminent danger to the National Grid. Transpower considers that this Rule, with amendment, gives effect to Policies 1, 2 and 5 of the NPSET.	**Amend** Rule TREE-R2 as follows: *"Activity Status: PER* *Where:* *1. The work is required to ensure the ~~safe~~ operation of the overhead lines or roading corridor including works or maintenance required under, and carried out in accordance with, the Electricity (Hazards from Trees) Regulations 2003, or the Telecommunications Act 2001; and* *2. The work is undertaken by a qualified arborist; and* *3. Council is notified two weeks prior to the work being undertaken except where the works are necessary to prevent an imminent danger to people, property or infrastructure."*

<table>
<tr><th>Provision</th><th>Support/Oppose</th><th>Submission/Reasons</th><th>Decision Sought</th></tr>
<tr><td colspan="4">Variation 1 to Plan Change 26</td></tr>
<tr><td colspan="4">Infrastructure</td></tr>
<tr><td>Introduction – Table 1</td><td>Support in part</td><td>Transpower acknowledges and supports the proposed amendments to Table 1 to clearly set out the provisions that apply to infrastructure, in addition to those in the Infrastructure Chapter. In respect of the proposed Hazardous Substances provisions Transpower notes that the following provisions apply to Infrastructure:
HAZS-O2 Sensitive Activities;
HAZS-P1 Storage and Use of Hazardous Substances;
HAZS-P2 Management of Major Hazard Facilities;
HAZS-R1 Use and/or Storage of Hazardous Substances, Excluding a Major Hazard Facility;
HAZS-R2 New Major Hazard Facilities and Additions or Alterations to Existing Major Hazard Facilities.
In this regard, it is not clear why HAZS-O1 Use and Storage of Hazardous Substances is not included in the list, while the implementing Policy HAZS-P1 is. Similarly, it is not clear why HAZS-O2 is included in the list but the implementing Policy HAZS-P3 Location of Sensitive Activities is not. In this regard, Transpower notes that infrastructure activities are not sensitive activities and therefore Objective HAZS-O2 (and Policy HAZS-P3) are not likely to be relevant to the Infrastructure Chapter. Further, some infrastructure activities involve the use and storage of hazardous substances. Therefore, it is appropriate that HAZS-O1 applies to infrastructure.</td><td>Amend Table 1 as follows:<table><tr><th>“Topic</th><th>Plan Provisions that Apply to Activities Managed in this Chapter</th></tr><tr><td>Hazardous Substances</td><td><s>HAZS-O2</s>, HAZS-O1, HAZS-P1, HAZS-P2, HAZS-R1, HAZS-R2”</td></tr></table></td></tr>
<tr><td colspan="4">PLAN CHANGE 29 – OPEN SPACE AND RECREATION ZONES, NOISE, SIGNS AND TEMPORARY ACTIVITIES, AND VARIATIONS</td></tr>
<tr><td colspan="4">Noise</td></tr>
<tr><td>Rule NOISE-R1 Noise Generating Activity Not Otherwise Listed</td><td>Support in part</td><td>Transpower generally supports Rule NOISE-R1 insofar as the Rule relates to the National Grid, except that Transpower is concerned that the 40dB$L_{ae(15min)}$ nighttime noise limit for specified zones fails to appropriately provide for noise associated with the operation and maintenance of Transpower’s substations and, as such, does not give effect to Policies 1, 2 and</td><td>Amend Rule NOISE-R1 as follows:
“Activity Status: PER
Where:
1. The noise generated by any activity does not exceed the limits set out in NOISE-TABLE 1, measured at the location set out in</td></tr>
</table>

Provision	Support/Oppose	Submission/Reasons	Decision Sought
		5 of the NPSET. For this reason, Transpower seeks that a nighttime noise limit of 45dB$L_{ae(15min)}$ applies to the National Grid throughout Mackenzie District. In this regard, it is understood that similar noise limits apply in other districts across New Zealand.	NOISE-TABLE 1 except that a nighttime (10.00pm — 7.00am) noise limit of 45dBLae(15min) applies to noise generated by the National Grid in all zones.
Signs			
Policy SIGN-P1 Signs Integral to Activities	**Support in part**	Transpower generally supports Policy SIGN-P1, but seeks limited amendments to the Policy to ensure that the Policy recognises the role official signs play in providing for public safety.	**Amend** Policy SIGN-P1 as follows: *"**SIGN-P1 Signs Integral to Activities*** *Enable signs that:* *1. are an integral component of activities anticipated within a zone;* *2. provide important community information;* *x. provide for public safety; or* *3. are associated with temporary events or activities."*
Rule SIGN-R3 Official Signs and Community Information Signs	**Support**	Transpower supports Rule SIGN-R3 (and the associated permitted activity standards) because the Rule provides for official signs as a permitted activity and as such provides for public safety.	**Retain** Rule SIGN-R3 and the associated relevant permitted activity standards as notified.
Variation 2 to Plan Change 27			
EARTHWORKS INTRODUCTION	**Oppose**	Transpower is concerned that, as a consequence of amendments to the directions in the Earthworks – Introduction Standard EW-S6 Proximity to the National Grid will no longer apply to activities where zones and provisions are exempt from the Earthworks provisions. Transpower considers that EW-S6 (and accompanying policy direction) must apply to all earthworks activities in the District in order to give effect to Policy 10 of the NPSET and to therefore protect the National Grid from activities that may compromise its operation, maintenance, upgrading and development.	**Amend** directions in respect of the application of the Earthworks Chapter to ensure that EW-S6 applies to all earthworks activities in the District.

Provision	Support/Oppose	Submission/Reasons	Decision Sought
PLAN CHANGE 30 – SPECIAL PURPOSE ZONES, AND VARIATIONS			
Variation 3 to Plan Change 27			
EARTHWORKS INTRODUCTION	**Oppose**	Transpower is concerned that, as a consequence of amendments to the directions in the Earthworks – Introduction Standard EW-S6 Proximity to the National Grid will no longer apply to some activities where zones and provisions are exempt from the Earthworks provisions. Transpower notes that the EW-S6 is generally included in the Rules in Proposed Plan Change 30. However, for the avoidance of doubt, Transpower considers that EW-S6 (and accompanying policy direction) must apply to all earthworks activities in the District in order to give effect to Policy 10 of the NPSET and to therefore protect the National Grid from activities that may compromise its operation, maintenance, upgrading and development.	**Amend** directions in respect of the application of the Earthworks Chapter to ensure that EW-S6 applies to all earthworks activities in the District.
DESIGNATIONS			
TPR-1 Ōhau A Outdoor Switchyard	**Support**	Formerly 3. Pursuant to Schedule 1 (Clause 4) of the Resource Management Act 1991 (RMA), Transpower gave notice on 1 August 2023 that its existing designations under the Operative Mackenzie District Plan are required to be included in the Proposed Mackenzie District Plan without modification.	**Retain** TPR-1 as a designation and its identification on the planning maps.
TPR-2 Takapō / Tekapo A Outdoor Switchyard	**Support**	Formerly 4. Pursuant to Schedule 1 (Clause 4) of the Resource Management Act 1991 (RMA), Transpower gave notice on 1 August 2023 that its existing designations under the Operative Mackenzie District Plan are required to be included in the Proposed Mackenzie District Plan without modification.	**Retain** TPR-2 as a designation and its identification on the planning maps.
TPR-3 Tekapo B Outdoor Switchyard	**Support**	Formerly 5. Pursuant to Schedule 1 (Clause 4) of the Resource Management Act 1991 (RMA), Transpower gave notice on 1 August 2023 that its existing designations under the Operative Mackenzie District Plan are required to be included in the Proposed Mackenzie District Plan without modification.	**Retain** TPR-3 as a designation and its identification on the planning maps.

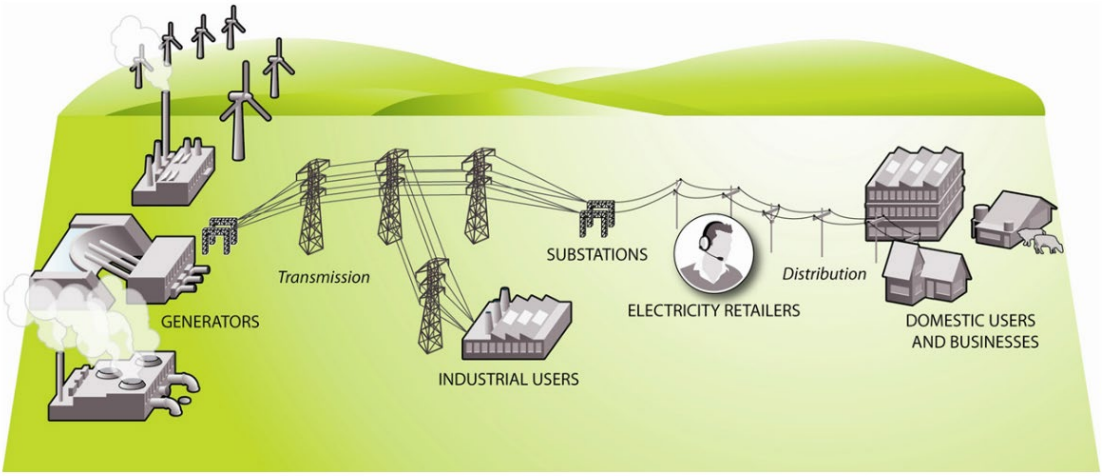
Provision	Support/Oppose	Submission/Reasons	Decision Sought
TPR-4 Twizel Electricity Substation	**Support in part**	Formerly 6. Pursuant to Schedule 1 (Clause 4) of the Resource Management Act 1991 (RMA), Transpower gave notice on 1 August 2023 that its existing designations under the Operative Mackenzie District Plan are required to be included in the Proposed Mackenzie District Plan without modification. The notice referenced Lot 2 DP 341333 but this has been incorrectly referenced in the proposed Designation Chapter.	**Amend the legal description to improve accuracy of the Proposed Mackenzie District Plan.** **Amend** the legal description for TPR-3 as follows: *"Lot 2 DP 341333"* **Retain** TPR-3 as a designation and its identification on the planning maps.
TPR-5 Albury Electricity Substation	**Support**	Formerly 7. Pursuant to Schedule 1 (Clause 4) of the Resource Management Act 1991 (RMA), Transpower gave notice on 1 August 2023 that its existing designations under the Operative Mackenzie District Plan are required to be included in the Proposed Mackenzie District Plan without modification.	**Retain** TPR-3 as a designation and its identification on the planning maps.

Appendix B: The National Grid and Relevant Statutory Framework

The National Grid

Transpower is the state-owned enterprise that plans, builds, maintains, owns and operates New Zealand's high voltage electricity transmission network, known as the National Grid. The National Grid connects power stations, owned by electricity generating companies, directly to major industrial users and distribution companies feeding electricity to the local networks that, in turn, distribute electricity to homes and businesses. The role of Transpower is illustrated in Figure 1.

Figure 1: Role of Transpower in New Zealand's Electricity Industry (source: MBIE)



The National Grid stretches over the length and breadth of New Zealand from Kaikohe in the North Island to Tiwai Point in the South Island and comprises some 11,000 circuit kilometres of transmission lines and cables and more than 170 substations, supported by a telecommunications network of some 300 telecommunication sites that help link together the components that make up the National Grid.

Transpower's role and function is determined by the State-Owned Enterprises Act 1986, the company's Statement of Corporate Intent, and the regulatory framework within which it operates. Transpower does not generate electricity, nor does it have any retail functions.

It is important to note that Transpower's role is distinct from electricity generation, distribution or retail. Transpower provides the required infrastructure to transport electricity from the point of generation to local lines distribution companies, which supply electricity to everyday users. These users may be a considerable distance from the point of generation.

Transpower's Statement of Corporate Intent for 1 July 2024, states that:

> *"Transpower is central to the New Zealand electricity industry. We connect generators to distribution companies and large users over long distances, providing open access and helping to balance supply and demand. The nature and scope of the activities we undertake are:*
>
> *- as grid owner, we own, build, maintain, replace, and enhance the physical infrastructure that connects those who generate and those who need electricity to live, work and play across the country; and*

- as system operator, through a service provided under contract to the Electricity Authority under the Electricity Industry Participation Code, we operate the electricity market, managing supply and demand for electricity in real time to ensure that the power system remains stable and secure."

In line with this role, Transpower needs to efficiently operate, maintain and develop the network to meet increasing demand and to maintain security of supply, thereby contributing to New Zealand's economic and social aspirations. It must be emphasised that the National Grid is an ever-developing system, responding to changing supply and demand patterns, growth, reliability and security needs.

As the economy electrifies in pursuit of the most cost efficient and renewable sources, the base case in Transpower's '*Whakamana i Te Mauri Hiko*' predicts that electricity demand is likely to increase around 55% by 2050. '*Whakamana i Te Mauri Hiko*' suggests that meeting this projected demand will require significant and frequent investment in New Zealand's electricity generation portfolio over the coming 30 years, including new sources of resilient and reliable grid connected renewable generation. In addition, new connections and capacity increases will be required across the transmission system to support demand growth driven by the electrification of transport and process heat. Simply put, New Zealand's electricity transmission system is the infrastructure on which our zero-carbon future will be built. This work supports Transpower's view that there will be an enduring role for the National Grid in the future, and the need to build new National Grid lines and substations to connect new, renewable generation sources to the electricity network.

The National Grid has operational requirements and engineering constraints that dictate and constrain where it is located and the way it is operated, maintained, upgraded and developed. Operational requirements are set out in legislation, rules and regulations that govern the National Grid, including the Electricity Act 1992, the Electricity Industry Participation Code, the New Zealand Electrical Code of Practice for Electrical Safe Distances ("NZECP34:2001"), and the Electricity (Hazards from Trees) Regulations 2003.

Transpower therefore has a significant interest in the development of effective, workable and efficient District Plan provisions through the Proposed Plan Changes, Variations and Designation, where those provisions may affect the National Grid, including in respect of existing assets, and the development of new assets, in the Mackenzie District ("District").

National Grid Assets in Mackenzie District

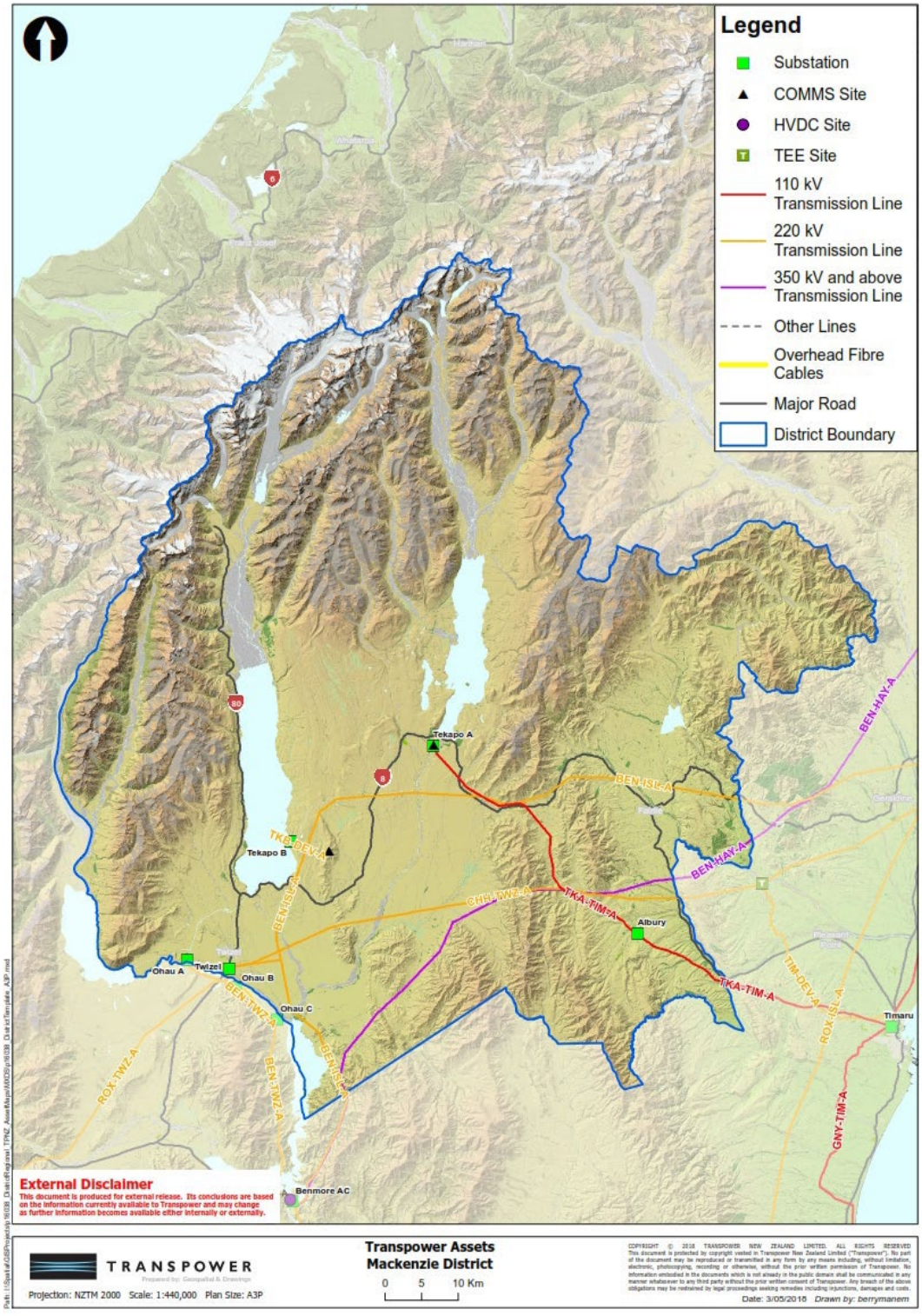
Transpower owns and operates a number of assets within, and traversing Mackenzie District. These assets supply electricity to Mackenzie District, as well as transmit electricity to the rest of New Zealand, and include around 320 kilometres of transmission lines, five substations, communications cables and associated equipment and include the following:

- Benmore – Haywards A (BEN-HAY-A) 350kV HVDC overhead transmission line on towers;
- Benmore – Islington A (BEN-ISL-A) 220kV overhead transmission line on towers;
- Benmore – Twizel A (BEN-TWZ-A) 220kV overhead transmission line on towers;
- Christchurch – Twizel A (CHH-TWZ-A) 220kV overhead transmission line on towers;
- Ohau A – Twizel A (OHA-TWZ-A) 220kV overhead transmission line on towers;
- Roxburgh – Twizel A (ROX-TWZ-A) 220kV overhead transmission line on towers;
- Tekapo A – Timaru A (TKA-TIM-A) 110kV overhead transmission line on poles (including pi poles);
- Tekapo B – Deviation A (TKB-DEV-A) 220kV overhead transmission line on towers;
- Twizel – Deviation A (TWZ-DEV-A) 220kV overhead transmission line on towers;
- Albury Substation;
- Ohau A Substation;
- Tekapo A Substation;
- Tekapo B Substation;

- Twizel Substation; and
- Two communications sites (Mt Mary and Tekapo A).

The location of these assets is shown on the plan at Figure 2.

Figure 2: Location of Transpower's assets in Mackenzie District



Statutory Framework

The national significance of the National Grid is recognised, in an RMA context, by the NPSET and the NESETA. These documents apply only to the National Grid, and do not apply to local electricity distribution networks, nor lines owned and operated by electricity generators.

National Policy Statement on Electricity Transmission 2008

The NPSET was gazetted on 13 March 2008. The NPSET confirms the national significance of the National Grid and provides policy direction to ensure that decision makers under the RMA:

- recognise the benefits of the National Grid;
- manage the adverse effects on the environment of the National Grid;
- manage the adverse effects of third parties on the National Grid; and
- facilitate long term strategic planning for transmission assets.

The NPSET sets a clear directive on how to provide for National Grid resources (including future activities) in planning documents and therefore councils have to work through how to make appropriate provision for the National Grid in their plans, in order to give effect to the NPSET.

A key reason for introducing the NPSET in 2008 was to resolve the inconsistencies that resulted from the variable provision for the National Grid in RMA plans and policy statements. This variance was despite the National Grid being largely the same across the country. In promoting the NPSET, central government accepted the importance of, and benefits of, a nationally consistent approach to decisions on transmission activities. The preamble of the NPSET highlights that the National Grid has particular physical characteristics and operational/security requirements that create challenges for its management under the RMA, and it is important there are consistent policy and regulatory approaches by local authorities.

The single Objective of the NPSET is:

> *"To recognise the national significance of the electricity transmission network by facilitating the operation, maintenance and upgrade of the existing transmission network and the establishment of new transmission resources to meet the needs of present and future generations, while:*
>
> - *manging the adverse environmental effects of the network; and*
> - *managing the adverse effects of other activities on the network."*

The NPSET's Objective is implemented by fourteen policies. The policies have to be applied by both Transpower and decision-makers under the RMA, as relevant. In a general sense these policies address the following:

- Policy 1: Recognising the benefits of the National Grid;
- Policy 2: Recognising and providing for the effective operation, maintenance, upgrading and development of the National Grid;
- Policies 3 to 5: Weighing the management of environmental effects against the operational constraints, site/route selection approach, and the requirements of existing assets;
- Policies 6 to 8: Reducing, minimising and avoiding adverse effects in differing contexts;
- Policy 9: Potential health effects;
- Policies 10 and 11: Managing adverse effects on the National Grid and providing for "buffer corridors";
- Policy 12: Mapping the National Grid; and
- Policies 13 and 14: Long-term development and planning for transmission assets.

Sections 55 and 75(3) of the RMA require the Council to give effect to the objectives and policies of the NPSET in the District Plan. Case law has established that the words "give effect to" means to implement, which is a strong directive, creating a firm obligation on the part of those subject to it.

Giving effect to the NPSET will ensure that:

- the National Grid is able to be safely, effectively and efficiently operated, maintained, upgraded and developed to provide a reliable, safe and secure supply of electricity to the Mackenzie District and beyond; and
- the adverse effects of development in proximity to the National Grid are appropriately managed and are reduced, minimised or avoided depending on the context in which the development occurs.

Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009

The NESETA came into effect on 14 January 2010 and sets out a national regulatory framework for activities related to existing National Grid lines, including the operation, maintenance and upgrading of such lines. The NESETA specifies permitted electricity transmission activities (subject to standards) and sets out resource consent requirements where these activities do not meet the standards. The NESETA only applies to the Transpower's National Grid lines that existed on 14 January 2010 and does not apply to new transmission lines or new or existing substations.

Under section 44A of the RMA, local authorities are required to ensure that there are no duplications or conflicts between the provisions of the NESETA and a district plan. That said, there are situations where the NESETA Regulations defer to a district plan. It is therefore important that the relevant district plan provisions are consistent with the intent and effect of the NESETA Regulations.

Canterbury Regional Policy Statement 2013

Section 75(3) of the RMA also requires the Proposed Plan Changes to give effect to a regional policy statement. The operative CRPS (republished in July 2021) includes the following Policy 16.3.4 that is specific to the National Grid and must be given effect to:

> ***"16.3.4 Reliable and resilient electricity transmission network within Canterbury***
>
> *To encourage a reliable and resilient national electricity transmission network within Canterbury by:*
>
> *1. having particular regard to the local, regional and national benefits when considering operation, maintenance, upgrade or development of the electricity transmission network;*
>
> *2. avoiding subdivision, use and development including urban or semi urban development patterns, which would otherwise limit the ability of the electricity transmission network to be operated, maintained, upgraded and developed;*
>
> *3. enabling the operational, maintenance, upgrade, and development of the electricity transmission network provided that, as a result of route, site and method selection, where;*
>
> *a. the adverse effects on significant natural and physical resources or cultural values are avoided, or where this is not practicable, remedied or mitigated; and*
>
> *b. other adverse effects on the environment are appropriately controlled."*

Appendix C: National Policy Statement on Electricity Transmission 2008

NATIONAL POLICY STATEMENT

on Electricity Transmission

Issued by notice in the Gazette on 13 March 2008

CONTENTS

newzealand.govt.nz

Preamble

This national policy statement sets out the objective and policies to enable the management of the effects of the electricity transmission network under the Resource Management Act 1991.

In accordance with section 55(2A)(a) of the Act, and within four years of approval of this national policy statement, local authorities are to notify and process under the First Schedule to the Act a plan change or review to give effect as appropriate to the provisions of this national policy statement.

The efficient transmission of electricity on the national grid plays a vital role in the well-being of New Zealand, its people and the environment. Electricity transmission has special characteristics that create challenges for its management under the Act. These include:

- Transporting electricity efficiently over long distances requires support structures (towers or poles), conductors, wires and cables, and sub-stations and switching stations.
- These facilities can create environmental effects of a local, regional and national scale. Some of these effects can be significant.
- The transmission network is an extensive and linear system which makes it important that there are consistent policy and regulatory approaches by local authorities.
- Technical, operational and security requirements associated with the transmission network can limit the extent to which it is feasible to avoid or mitigate all adverse environmental effects.
- The operation, maintenance and future development of the transmission network can be significantly constrained by the adverse environmental impact of third party activities and development.
- The adverse environmental effects of the transmission network are often local – while the benefits may be in a different locality and/or extend beyond the local to the regional and national – making it important that those exercising powers and functions under the Act balance local, regional and national environmental effects (positive and negative).
- Ongoing investment in the transmission network and significant upgrades are expected to be required to meet the demand for electricity and to meet the Government's objective for a renewable energy future, therefore strategic planning to provide for transmission infrastructure is required.

The national policy statement is to be applied by decision-makers under the Act. The objective and policies are intended to guide decision-makers in drafting plan rules, in making decisions on the notification of the resource consents and in the determination of resource consent applications, and in considering notices of requirement for designations for transmission activities.

However, the national policy statement is not meant to be a substitute for, or prevail over, the Act's statutory purpose or the statutory tests already in existence. Further, the national policy statement is subject to Part 2 of the Act.

For decision-makers under the Act, the national policy statement is intended to be a relevant consideration to be weighed along with other considerations in achieving the sustainable management purpose of the Act.

This preamble may assist the interpretation of the national policy statement, where this is needed to resolve uncertainty.

1. Title

This national policy statement is the National Policy Statement on Electricity Transmission 2008.

2. Commencement

This national policy statement comes into force on the 28th day after the date on which it is notified in the *Gazette*.

3. Interpretation

In this national policy statement, unless the context otherwise requires:
Act means the Resource Management Act 1991.

Decision-makers means all persons exercising functions and powers under the Act.

Electricity transmission network, electricity transmission and transmission activities/ assets/infrastructure/resources/system all mean part of the national grid of transmission lines and cables (aerial, underground and undersea, including the high-voltage direct current link), stations and sub-stations and other works used to connect grid injection points and grid exit points to convey electricity throughout the North and South Islands of New Zealand.

National environmental standard means a standard prescribed by regulations made under the Act.

National grid means the assets used or owned by Transpower NZ Limited.
Sensitive activities includes schools, residential buildings and hospitals.

4. Matter of national significance

The matter of national significance to which this national policy statement applies is the need to operate, maintain, develop and upgrade the electricity transmission network.

5. Objective

To recognise the national significance of the electricity transmission network by facilitating the operation, maintenance and upgrade of the existing transmission network and the establishment of new transmission resources to meet the needs of present and future generations, while:

- managing the adverse environmental effects of the network; and
- managing the adverse effects of other activities on the network.

6. Recognition of the national benefits of transmission

POLICY 1

In achieving the purpose of the Act, decision-makers must recognise and provide for the national, regional and local benefits of sustainable, secure and efficient electricity transmission. The benefits relevant to any particular project or development of the electricity transmission network may include:

i) maintained or improved security of supply of electricity; or

ii) efficient transfer of energy through a reduction of transmission losses; or

iii) the facilitation of the use and development of new electricity generation, including renewable generation which assists in the management of the effects of climate change; or

iv) enhanced supply of electricity through the removal of points of congestion.

The above list of benefits is not intended to be exhaustive and a particular policy, plan, project or development may have or recognise other benefits.

7. Managing the environmental effects of transmission

POLICY 2

In achieving the purpose of the Act, decision-makers must recognise and provide for the effective operation, maintenance, upgrading and development of the electricity transmission network.

POLICY 3

When considering measures to avoid, remedy or mitigate adverse environmental effects of transmission activities, decision-makers must consider the constraints imposed on achieving those measures by the technical and operational requirements of the network.

POLICY 4

When considering the environmental effects of new transmission infrastructure or major upgrades of existing transmission infrastructure, decision-makers must have regard to the extent to which any adverse effects have been avoided, remedied or mitigated by the route, site and method selection.

POLICY 5

When considering the environmental effects of transmission activities associated with transmission assets, decision-makers must enable the reasonable operational, maintenance and minor upgrade requirements of established electricity transmission assets.

POLICY 6
Substantial upgrades of transmission infrastructure should be used as an opportunity to reduce existing adverse effects of transmission including such effects on sensitive activities where appropriate.

POLICY 7
Planning and development of the transmission system should minimise adverse effects on urban amenity and avoid adverse effects on town centres and areas of high recreational value or amenity and existing sensitive activities.

POLICY 8
In rural environments, planning and development of the transmission system should seek to avoid adverse effects on outstanding natural landscapes, areas of high natural character and areas of high recreation value and amenity and existing sensitive activities.

POLICY 9
Provisions dealing with electric and magnetic fields associated with the electricity transmission network must be based on the International Commission on Non-ioninsing Radiation Protection *Guidelines for limiting exposure to time varying electric magnetic fields (up to 300 GHz)* (Health Physics, 1998, 74(4): 494-522) and recommendations from the World Health Organisation monograph *Environment Health Criteria* (No 238, June 2007) or revisions thereof and any applicable New Zealand standards or national environmental standards.

8. Managing the adverse effects of third parties on the transmission network

POLICY 10
In achieving the purpose of the Act, decision-makers must to the extent reasonably possible manage activities to avoid reverse sensitivity effects on the electricity transmission network and to ensure that operation, maintenance, upgrading, and development of the electricity transmission network is not compromised.

POLICY 11
Local authorities must consult with the operator of the national grid, to identify an appropriate buffer corridor within which it can be expected that sensitive activities will generally not be provided for in plans and/or given resource consent. To assist local authorities to identify these corridors, they may request the operator of the national grid to provide local authorities with its medium to long-term plans for the alteration or upgrading of each affected section of the national grid (so as to facilitate the long-term strategic planning of the grid).

9. Maps

POLICY 12
Territorial authorities must identify the electricity transmission network on their relevant planning maps whether or not the network is designated.

10. Long-term strategic planning for transmission assets

POLICY 13
Decision-makers must recognise that the designation process can facilitate long-term planning for the development, operation and maintenance of electricity transmission infrastructure.

POLICY 14
Regional councils must include objectives, policies and methods to facilitate long-term planning for investment in transmission infrastructure and its integration with land uses.

Explanatory note

This note is not part of the national policy statement but is intended to indicate its general effect

This national policy statement comes into force 28 days after the date of its notification in the *Gazette*. It provides that electricity transmission is a matter of national significance under the Resource Management Act 1991 and prescribes an objective and policies to guide the making of resource management decisions.

The national policy statement requires local authorities to give effect to its provisions in plans made under the Resource Management Act 1991 by initiating a plan change or review within four years of its approval.