

BEFORE THE HEARING PANEL

UNDER

The Resource Management Act 1991

AND

IN THE MATTER

of a Notice of Requirement by KiwiRail
Holdings Limited to designate the Palmerston
North Regional Freight Hub

**STATEMENT OF EVIDENCE OF GARY ALAN SCHOLFIELD
ON BEHALF OF POWERCO LIMITED**

Dated

17 August 2021

INTRODUCTION

- [1] My full name is Gary Alan Scholfield.
- [2] I am employed as Environmental Planner by Powerco Limited (**Powerco**) and have worked in this role since January 2020.

Qualifications and Experience

- [3] I hold a Bachelor of Resource and Environmental Planning Degree from Massey University (1999). I have been engaged in the field of resource and environmental management for over 20 years however I wish to note that this evidence is not given as expert evidence, but rather in my capacity as an employee of Powerco.
- [4] In my current role I hold primary responsibility for managing submissions on District and Regional plan changes, bylaws and third-party resource consent applications across the Powerco network footprint¹. I have also assisted with a number of resource consent applications and Notices of Requirement to designate Powerco substations and line routes.
- [5] Between October 2010 and April 2017, I worked for Powerco in roles where I held responsibility for securing resource management approvals and property rights for network development and renewal projects. Having worked for Powerco for a number of years, I have a very good working knowledge of the Company's operations, assets and strategic direction, including the sub-transmission and distribution networks located in Palmerston North.
- [6] I am authorised to present this evidence on behalf of Powerco.

STRUCTURE OF EVIDENCE

- [7] The purpose of my evidence is to:

¹ The Powerco footprint includes 6 regional councils and 29 territorial authorities.

- (a) Provide an overview of the Powerco networks within the area to be designated.
- (b) Outline the key areas of concern for Powerco and the relief sought.
- (c) Respond to comments made in the s42A planning report.

POWERCO'S BUSINESS AND DISTRIBUTION NETWORKS

Overview of Powerco

- [8] Powerco is a New Zealand based energy company which distributes both electricity and natural gas. Powerco was formed following the 1999 electricity industry reforms when it decided to become a "network business" (or lines company). During this time, it sold its generation and retail businesses, and grew its distribution operations.
- [9] The Powerco electricity networks can be found in the Coromandel, Bay of Plenty, South Waikato, Taranaki, Wanganui, Manawatu and the Wairarapa. It has gas networks in Taranaki, Manawatu, Hawkes Bay and Wellington.
- [10] Powerco keeps the lights on and gas flowing to around 1.1 million customers, across 452,000 homes, businesses and organisations in the North Island. Our networks cover more than 30,000km and we support the economy by supplying a safe and reliable supply of energy to some of New Zealand's biggest industries.

The New Zealand Electricity System

- [11] The electricity system in New Zealand is an interconnected system that comprises several distinct activities. While the upstream aspects of the electricity system, namely generation and transmission seem to be well understood at a high level, the

understanding and importance of distribution networks is often left wanting. Figure 1 below contains a simplified diagram of the electricity system in New Zealand.

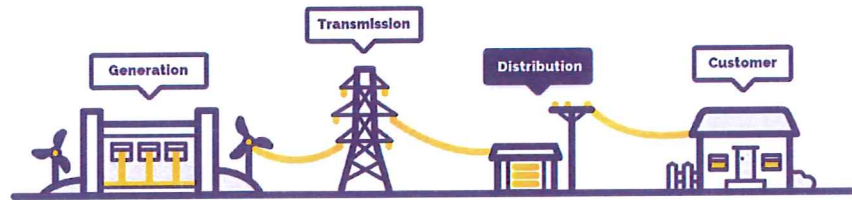


Figure 1 - The New Zealand Electricity System

Supply of Electricity to Palmerston North

[12] When looking at the supply of electricity to Palmerston North, various generators across the Country connect to the Transpower grid which conveys high voltage electricity to Grid Exit Points ('GXP's') located at Bunnythorpe and Linton. These are shown on Image 1 below.

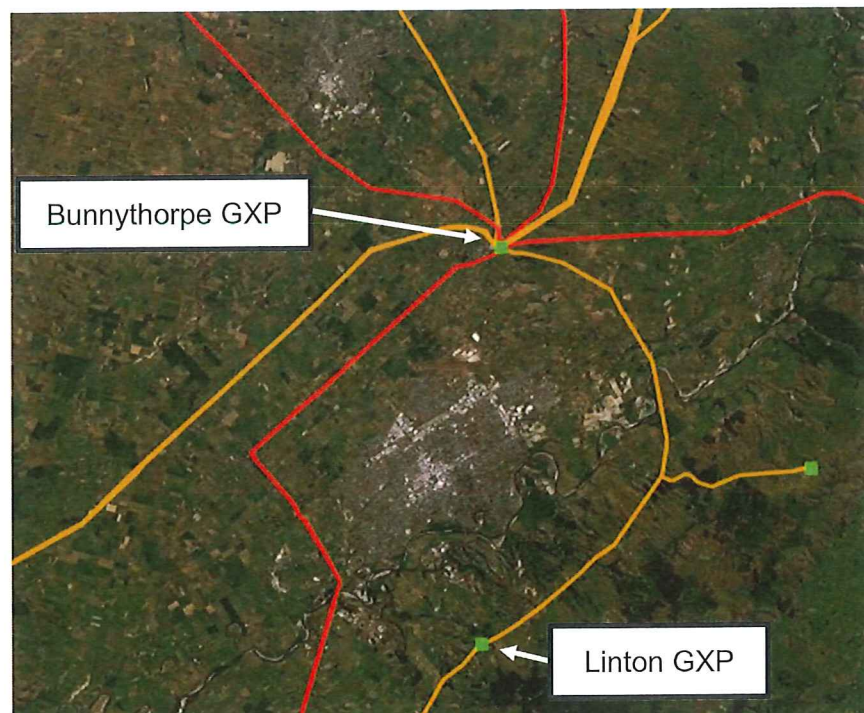


Image 1 – Transpower Asset Map around Palmerston North²

² Sourced from: <https://www.transpower.co.nz/our-work/maps-and-gis-data>

- [13] You will note that these GXP's are located on the periphery of Palmerston North, they do not extend into the main city centre. It is the Powerco networks that take supply of electricity from these two GXP's to each customer within Palmerston North, as broadly illustrated on Image 2 below.

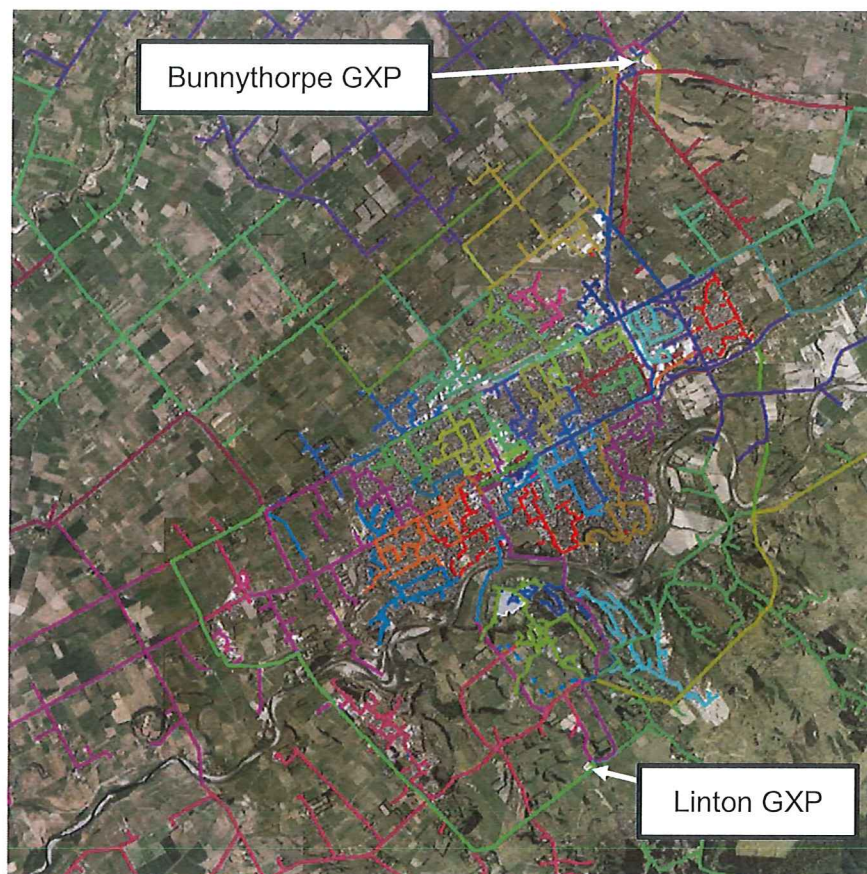


Image 2 – Powerco Assets within Palmerston North³

- [14] It is therefore evident that Powerco's networks are critical to the supply of electricity to Palmerston North. This criticality is reflected in the fact that Powerco assets are classified as a "Lifeline Utility" under the Civil Defence Emergency Management Act 2002.
- [15] Furthermore, our assets are also explicitly recognised in the Palmerston North District Plan and the Horizons One Plan as we operate subtransmission and distribution networks above 6.6kV.

³ Sourced from Powerco internal GIS. Only shows networks operating at 11kV and above.

POWERCO NETWORKS WITHIN THE AREA TO BE DESIGNATED

- [16] Powerco only has electricity distribution networks located within the areas covered by the Kiwirail designation – there are no gas distribution networks owned by Powerco in the areas affected by the designation. Attachment A to our submission identifies Powerco assets located within the designation boundaries.
- [17] As noted, Powerco takes supply from Transpower at the Bunnythorpe GXP and uses a number of 33kV subtransmission lines to supply substations within Palmerston North. There are three separate 33kV circuits passing through the area to be designated, which are critical to the supply of electricity of Palmerston North.
- [18] To use a traffic analogy, Powerco's sub-transmission lines are the 'State Highways' of our network. They provide high voltage links between substations – customers do not generally connect to our network at such a high voltage.
- [19] The assets passing through the area to be designated directly feed over 11,246 Installation Control Points (ICP's) and can provide an alternate supply of electricity to an additional 20,028 ICP's when required. It is important to note that a single ICP may provide electricity to serve the needs of a number of individuals. For example, a typical house would have one ICP however that ICP provides supply to all residents of that house. Therefore, while the number of ICP's served by these networks may not seem that great, a significantly higher number of people rely on them to meet their electricity needs.
- [20] The networks in the area to be designated supply electricity to residential homes, farms, businesses, schools and industrial activities (among many other activities) within Palmerston North.

KEY AREAS OF CONCERN AND RELIEF SOUGHT

[21] Powerco's key areas of concern relate to the following matters:

- Ensuring continuity of electricity supply for assets currently located within the designation boundaries.
- Ensuring free and unrestricted access to our assets.
- Minimising the extent of road closures associated with the designation as public roads are a key thoroughfare for existing and new network linkages – as provided for by s24 of the Electricity Act 1992.
- Ensuring that the location, design and construction of any works, buildings or structures authorised by this designation comply with the New Zealand Code of Practice for Electrical Safe Distances 34:2001.
- Avoiding physical contact and damage to our networks during construction and operation of the freight hub.
- Avoiding earthworks that reduce or increase cover over our underground assets.
- Ensuring that any trees or vegetation planted in the vicinity of Powerco assets comply with the Electricity (Hazards from Trees) Regulations 2003.

[22] The NoR documentation contains little commentary on the presence of our networks within the area to be designated. The AEE⁴ indicates that some services may need to be relocated however no adverse effects are anticipated. The Design, Construction and Operation Report⁵ discusses supply to the freight hub and mentions local reticulation across the designation extent needing to be removed. I am unsure if all Powerco owned reticulation within the designation boundaries is captured by this statement. For instance, does this include the 11kV network on Roberts Line?

⁴ Section 9.12, page 75

⁵ Technical Assessment Report A, Section 2.4.4, page 12

- [23] Due to a lack of information on how impacts on our network will be addressed, Powerco cannot conclude whether its networks will be adversely affected or not. However, due to the lineal and interconnected nature of our electricity distribution networks and the large area that the designation applies to, it is reasonable to assume there will be some level of effect on our networks.
- [24] Based on the concerns outlined above, Powerco is seeking the following relief (as outlined in our submission):

Modification of the Requirement

- a) That the designation boundaries are reduced in area along Railway Road, Roberts Line and Richardsons Line so that it does not extend over those portions of legal road.*

Conditions

- a) That all Powerco owned infrastructure must be relocated outside of the designation boundaries before the Freight Hub becomes operational. All costs associated with this work are to be met by the requiring authority.*
- b) The requiring authority shall ensure that the location, design and construction of any works authorised by this designation, including the operation of mobile plant and / or machinery complies with the New Zealand Code of Practice for Electrical Safe Distances 34:2001.*
- c) Any trees or vegetation planted in the vicinity of Powerco assets shall be located, selected and/or managed to comply with the Electricity (Hazards from Trees) Regulations 2003 and take into account the potential for roots to interfere with underground infrastructure. Selection of species should be on the basis of the anticipated mature height of the vegetation which should not exceed 4m in height.*

- d) *Prior to the commencement of any site works, the requiring authority shall accurately identify the location of existing overhead or underground network utilities (www.beforeudig.co.nz). Construction plans must identify the locations of the existing network utilities and appropriate physical indicators must be placed on the ground showing specific surveyed locations. All construction personnel, including contractors, are to be made aware of the presence and location of the various existing network utilities which traverse, or are in close proximity to the project area, and the restrictions in place in relation to those existing network utilities.*

S42A PLANNING REPORT

- [25] The s42A report⁶ acknowledges that an assessment of potential effects on network utilities that are nationally or regionally significant has not been undertaken – despite this being requested as further information⁷. I note Powerco networks are specifically included⁸ as regionally important infrastructure and the effects on Powerco infrastructure should have been assessed.
- [26] At paragraph 760, the reporting planners agree with some of the conditions requested by Powerco, but have not agreed with the request for Powerco assets to be relocated, citing this as an operational relationship issue. I disagree with this conclusion, as there is the potential for effects on our network such as physical damage, as well as restrictions on our ability to access, operate, inspect and maintain our networks if they are to remain within the designated area.
- [27] I note that the reporting planners have recommended a condition⁹ that requires: '*continuity of service and efficient relocation of any*

⁶ S42A Technical Evidence: Planning, Paragraph 759, page 215

⁷ PNCC Further Information Request #171, page 33

⁸ Objective 23.3.1 of the Palmerston North District Plan and Policy 3-1 of the Horizons Regional Policy Statement

⁹ #127, page 41 of the S42A Planning Evidence: Effects and Recommendations Summary Table.

PNCC owned three waters infrastructure, that is affected by the construction or operation of the Freight Hub.' The condition was inserted as Council services will be disrupted by construction of the Freight Hub and there is a need to ensure an appropriate level of service is maintained. The same can be said for Powerco infrastructure, so I am unclear why our relief sought has not been accepted.

- [28] The reporting planners have queried¹⁰ whether an Electricity Transmission Management Plan would address Powerco's concerns. In principle, Powerco is very supportive of a management plan being prepared and I have included, as Appendix A, an example of conditions that could be included in Council's recommendation. If a management plan is prepared, I would ask that it has a generic title – as "Electricity Transmission" would imply that it would only apply to the Transpower network.

- [29] If a condition is inserted that requires a management plan along the lines of that contained within Appendix A to this evidence, the concerns of Powerco will be met.

- [30] If a management plan is not recommended, then Powerco supports the recommended conditions 122, 123, and 125¹¹.

- [31] Powerco is uncertain about the inclusion of condition 124. The National Code of Practice for Utility Operators Access to Transport Corridors does contain some useful provisions, however it also contains specific conditions for access to Railway Corridors (which would presumably apply to the whole designated area). The requirements under this Code of Practice are far more restrictive for assets in railway corridors when compared to the existing situation of the assets being located in legal road. Powerco would be concerned if the inclusion of this condition provides Kiwirail with

¹⁰ S42A Technical Evidence: Planning, Paragraph 765, page 217.

¹¹ As contained in the S42A Planning Evidence: Effects and Recommendations Summary Table.

the ability to refuse Powerco access to its assets within the designated area.

- [32] The last outstanding matter for Powerco would be the insertion of a condition requiring all Powerco owned infrastructure to be relocated outside of the designation boundaries before the Freight Hub becomes operational. As discussed above, there is the potential for adverse effects on our network resulting from activities authorised by the designation. These potential adverse effects must be addressed through conditions similar to those outlined in paragraph [24] of this evidence.

CONCLUSION

- [33] For the reasons outlined above, it is clear that the Powerco networks located within the designation boundaries are regionally significant. The requests Powerco has made to include conditions in the Council's recommendations are entirely reasonable to ensure continuity of electricity supply.
- [34] The imposition of appropriate conditions will ensure that the ongoing operation, maintenance and upgrading of the local distribution network is appropriately taken into consideration as the development of the Freight Hub progresses. This will have positive benefits to residents, businesses and essential services in Palmerston North.

Gary Alan Scholfield

17 August 2021

Appendix A – Example Network Utilities Management Plan

- (1) *Prior to the commencement of any works on the site, the requiring authority shall prepare a Network Utilities Management Plan ('NUMP') so that enabling works, design, construction and ongoing operational works associated with the designation adequately take account of, and include measures to address the safety, integrity, protection or, where necessary, relocation of, existing network utilities. The NUMP shall be prepared in consultation with those infrastructure providers which have existing network utilities that are directly affected by the project and shall include:*

 - (a) *The methods the requiring authority will use to liaise with all infrastructure providers that have existing network utilities which are directly affected by, or located in close proximity to, the project including the process for:*

 - (i) *Seeking network utility provider approval of proposed works where their assets are affected;*
 - (ii) *The process for obtaining any supplementary authorisations (e.g. easements and/or resource consents); and*
 - (iii) *Protocols for inspection and final approval of works by network utility providers.*
 - (b) *The methods the requiring authority will use to enable infrastructure providers to access existing network utilities for maintenance at all reasonable times, and to access existing network utilities for emergency works at all times, during construction and the ongoing activities associated with the site.*
 - (c) *The methods the requiring authority will use to ensure that all construction personnel, including contractors, are aware of the presence and location of the various existing network utilities which traverse, or are in close proximity to, the project, and the restrictions in place in relation to those existing network utilities. This shall include plans identifying the locations of the existing network utilities and appropriate physical indicators on the ground showing specific surveyed locations.*
 - (d) *How the requiring authority will meet the costs of any project-related works that are required in order to protect, relocate and/or reinstate existing network utilities. Such methods shall be consistent with the*

provisions of the Gas Act 1992, the Electricity Act 1992 and the Telecommunications Act 2001.

- (e) The methods the requiring authority will use to ensure that provision, both physical and legal, is made for future maintenance access to utilities to a standard at least equivalent to that currently existing.*
 - (f) Measures to be used to accurately identify the location of existing network utilities.*
 - (g) Measures for the protection, relocation and/or reinstatement of existing network utilities.*
 - (h) Measures to ensure the continued operation and supply of essential infrastructure services. This includes measures to ensure continued operation and supply of network utilities (electricity and telecommunications) to surrounding properties.*
 - (i) Measures to provide for the safe operation of plant and equipment, and the safety of workers, in proximity to existing network utilities.*
 - (j) Earthworks management procedures (including depth and extent of earthworks and dust management), for earthworks in close proximity to existing network utilities.*
 - (k) Emergency management procedures in the event of any emergency involving existing network utilities.*
- (2) A copy of the NUMP shall be submitted to the Council for review and certification at least 10 working days prior to the commencement of any enabling or construction works. The purpose of the certification process is for the Council to:*
- (a) Confirm that the appropriate liaison with infrastructure providers has occurred and that their concerns have been appropriately taken into account.*
 - (b) Confirm that the NUMP meets the requirements of Condition (1) of this Consent.*
- (3) The requiring authority shall adhere to the relevant requirements of the NUMP at all times during enabling, construction and ongoing activities associated with the designation.*

- (4) *As built drawings showing the location of any relocated utilities shall be provided to utility owners within three months of completion of the utility relocation.*
- (5) *All works around electricity assets shall comply with the Electricity (Hazards from Trees) Regulations 2003 and the New Zealand Code of Practice for Electrical Safe Distances 34:2001.*