

# **Electricity Works above 110kV and 100MVA on Roads and Level Crossings**

## **Summary of Submissions**

Resources and Networks Branch

December 2004

## **Contents**

---

<b>1. AUCKLAND CITY COUNCIL</b> .....	<b>1</b>
<b>2. AURORA ENERGY</b> .....	<b>1</b>
<b>3. CHRISTCHURCH CITY COUNCIL</b> .....	<b>1</b>
<b>4. COUNTIES POWER</b> .....	<b>2</b>
<b>5. ELECTRICITY ENGINEERS ASSOCIATION OF NEW ZEALAND</b> .....	<b>2</b>
<b>6. ENVIRONMENT WAIKATO</b> .....	<b>2</b>
<b>7. GREATER WELLINGTON REGIONAL COUNCIL</b> .....	<b>2</b>
<b>8. HOROWHENUA DISTRICT COUNCIL</b> .....	<b>2</b>
<b>9. KAIPARA DISTRICT COUNCIL</b> .....	<b>2</b>
<b>10. LOCAL GOVERNMENT NEW ZEALAND</b> .....	<b>3</b>
<b>11. MANUKAU CITY COUNCIL</b> .....	<b>3</b>
<b>12. MASTERTON DISTRICT COUNCIL</b> .....	<b>4</b>
<b>13. MATAMATA-PIAKO DISTRICT COUNCIL</b> .....	<b>4</b>
<b>14. MERIDIAN ENERGY</b> .....	<b>5</b>
<b>15. NELSON CITY COUNCIL</b> .....	<b>5</b>
<b>16. NEW PLYMOUTH DISTRICT COUNCIL</b> .....	<b>5</b>
<b>17. NEW ZEALAND RAILWAYS CORPORATION</b> .....	<b>5</b>
<b>18. PORIRUA CITY COUNCIL</b> .....	<b>5</b>
<b>19. POWERCO</b> .....	<b>5</b>
<b>20. RODNEY DISTRICT COUNCIL</b> .....	<b>6</b>
<b>21. SOUTH WAIRARAPA DISTRICT COUNCIL</b> .....	<b>6</b>
<b>22. TELECOM NEW ZEALAND</b> .....	<b>6</b>
<b>23. TRANSIT NEW ZEALAND</b> .....	<b>6</b>
<b>24. TRANSPOWER NEW ZEALAND</b> .....	<b>7</b>
<b>25. VECTOR</b> .....	<b>7</b>
<b>26. WAIKATO DISTRICT COUNCIL</b> .....	<b>7</b>
<b>27. WAIMAKARIRI DISTRICT COUNCIL</b> .....	<b>7</b>
<b>28. WAIROA DISTRICT COUNCIL</b> .....	<b>8</b>
<b>29. WELLINGTON CITY COUNCIL</b> .....	<b>8</b>

## 1. Auckland City Council

---

Supports the proposed amendment subject to two conditions:

- ACC can, through the provisions of the RMA, ensure that any new power lines be located underground in existing urban/suburban areas; and
- that this restriction applies to any area of undeveloped land that is likely to be developed in the future.

ACC District Plans for the CBD and Isthmus areas ensure that an electricity operator cannot erect new overhead lines of any voltage or capacity as a permitted activity. A resource consent is therefore required. ACC has a preference for undergrounding lines so it's unlikely that a consent would be granted for anything else. Undergrounding cables is generally a permitted activity (subject to a archaeological, heritage, trees and geographical considerations).

Notes that criteria for setting reasonable conditions are set out in Section 119 of the Telecommunications Act 2001 and are generally accepted as the norm for road opening activities.

## 2. Aurora Energy

---

Supports the proposed amendments, in principle, but concerned about the amount of road corridor (width / depth) that Transpower could require and the means to ensure fair access by all utilities.

## 3. Christchurch City Council

---

Supports the proposed amendments subject to the condition that all new works are undergrounded.

CCC would prescribe reasonable conditions relating to:

- indemnity issues as a result of loss, damage or injury to property or persons;
- consents and utilities affected;
- works complying with NZSS handbook 2002:2003 *Working in the Road* and other specific conditions;
- use of the license area;
- relocation of services etc at no cost to Council;
- subletting/terminator/abandonment/rates;
- road environment compensation in the form of road upgrading will be required, where longer duration period is encountered for the installation.

## **4. Counties Power**

---

Opposes the proposals, due to concern that Transpower would then use the road corridor as a bulk transmission route, which would be undesirable.

Submits that Transpower should have statutory right to cross a road, but that the rights should not extend to construction of structures to support 110kV or 100MVA in the road corridor.

## **5. Electricity Engineers Association of New Zealand**

---

Supports proposed amendment, for the following reasons: difficulties faced by all utilities in getting access to private land to lay new services or upgrade existing services; increasing demand for electricity; and the important role electricity plays within New Zealand economics and social development.

Supports the careful and equitable management of the road reserve as a “utility commons”.

## **6. Environment Waikato**

---

Considers that “as of right” provisions should not apply, and 110kV and 100MVA lines should not be treated on the same basis as lower voltage/amperage lines as they are substantially different in nature.

Considers that designation provisions should apply to high voltage transmission lines.

Suggests that decisions on this issue should be delayed until the RMA reforms are in place and a national policy statement on energy has been developed.

## **7. Greater Wellington Regional Council**

---

No objection to proposed amendments on condition that as far as water pipes are concerned, a definition is provided as to what “other than a main” means in the Electricity Act. Suggests that “water main” is defined as meaning a pipe greater than 50 mm diameter. Notes that the provisions in the Electricity Act currently are generally more comprehensive than those available to other utility providers. Suggests that the Ministry should be examining the rights of other utility providers and not just have a focus on electricity.

## **8. Horowhenua District Council**

---

Considers the status quo is appropriate.

## **9. Kaipara District Council**

---

KDC would want to retain the rights to object to major transmission lines involving towers or significant poles and a resource consent would therefore still be required. Cites safety concerns and liability for third party claims for damages or loss. KDC would require Traffic Management Plans to be submitted before any works could be approved. Notes the likely

high costs to relocate towers or poles in the road corridor in the event of desired improvements to the road network (road realignment and widening).

## **10. Local Government New Zealand**

---

LGNZ's submission includes 22 Local Authority responses to an LGNZ questionnaire on the proposed amendment.

LGNZ notes its role in the formation of the New Zealand Utilities Advisory Group which is working towards achieving a robust legal policy and operating framework and has developed a number of best practice products for local authorities and utilities. The Group has also agreed on proposed changes to utility legislation to provide a consistent policy formula across all utilities legislation. This includes expanding the definition of "reasonable conditions" and providing an appeal opportunity against the reasonable conditions to the District Court and on points of law to the High Court.

LGNZ considers that government should address the issue in the wider policy context of amendments to the RMA and the proposed greater use of National Policy Statements and National Environmental Standards.

Key concerns emerging from the councils were in relation to the impacts of transmission lines in the road corridor, in particular the visual impact of overhead reticulation and towers and the potential space requirements for underground reticulation. LGNZ considers that these requirements place transmission lines in a different category than conventional electricity reticulation and therefore require a different approach.

LGNZ noted that several councils felt that their District Plans would be able to adequately control the transmission services but others felt that their District Plan would not be adequate.

LGNZ notes that the role of a local authority as a road controlling authority is provided for under section 24 of the Electricity Act where they are able to set "reasonable conditions". Concerns usually relate to reinstatement of the carriageway, the safe and efficient flow of traffic and minimising disruption to the local community as set out in the Telecommunications Act 2001. District Plan provisions are usually a more effective means of controlling overhead reticulation and the RCA's role is more effective in managing the road asset, underground installations and resolving potential coordination issues with other utilities.

LGNZ notes that the proposed amendments do not offer any guidance as to the extent of the impacts or space requirements, of electricity cables above the 110kV/100MVA threshold.

An additional concern raised is specific to Section 30 of the Electricity Act that prevents a local authority requiring payment for occupation of the legal road by an electricity operator.

## **11. Manukau City Council**

---

Expresses strong concern over any changes to legislation that would enable Transpower to install major power lines within roads as of right, subject only to the provision of the Electricity Act.

MCC expects that projects of major significance should be subject to wider consenting processes by way of designation or application. However, MCC notes that issues remain in relation to property right issues with designations, and overlapping designations.

MCC submits that there may be a case for national scale reticulation lines to make some contribution or payment for occupation of road space because the impacts on amenity and/or opportunity costs are borne by local communities (when the benefits are national), and there might otherwise be an incentive for such occupation ahead of locating works on privately owned land.

## **12. Masterton District Council**

---

Not a formal submission, as the proposal gives rise to no issues that cannot be addressed through RMA process or reasonable conditions.

## **13. Matamata-Piako District Council**

---

Considers insufficient information was given in the proposal to make an informed response, particularly in relation to details of the sizes (heights, types of structures, widths, layout, footprint size, foundation requirements, cable sizes and diameters, safety clearances etc) of any proposed pylons or towers.

There are a number of utilities competing for space in the road corridor (which is generally 20 wide in the predominantly rural areas MPDC covers). In some areas MPDC notes that it will be difficult to accommodate another utility, in particular one that may require a significant amount of space.

Applications for new transmission lines would require a notified resource consent demonstrating the effects and mitigation measures for a proposed new line.

The positioning of high voltage lines in the road corridor could mean that Council and property owners could incur additional costs in their routine maintenance of their borders. MPDC would expect the network operator to pay for road stabilizing measure if large trees were to be removed to make way for new structures.

MPDC is concerned that pylons or towers could be located on “paper roads” (unformed roads typically leading to DOC land, rivers and reserves) which could mean that the Council could have difficulty in dispose of this land at some time in the future.

If traffic was affected as a result of the need for maintenance vehicles in the road Council would expect the network operator to meet the costs of road closure of traffic diversion. Damage to the road and road corridor would be charged to the network operator.

MPDC notes concerns about:

- Safety, in relation to clearance heights of lines;
- difficulties around carrying out routine road maintenance (in new lines were installed) and the potential future realignment of roads and the resulting costs to relocate the poles or pylons;
- potential disruption to telecommunications and associated costs;

- effect on other users of the road berm (e.g. horse riding, cyclists, stock grazing and movement along the road).

## **14. Meridian Energy**

---

Supports proposed amendments and supports Transpower's submission. Discusses Meridian's development of renewable electricity generation projects and the potential need for new overhead transmission lines to support such developments.

## **15. Nelson City Council**

---

Notes that the Nelson Resource Management Plan permits minor upgrades to existing lines (subject to conditions). The construction of new lines is a discretionary activity requiring resource consent. The Council has a policy of undergrounding all new electricity works and seeks to coordinate the programming of works.

## **16. New Plymouth District Council**

---

Not in favour of the proposed amendments due to concerns about: traffic safety, relocation costs borne by the RCA, additional administration and road maintenance costs, road user costs and delays, electrical safety, lost opportunity for future use of unformed roads.

## **17. New Zealand Railways Corporation**

---

Does not support amendment of s31. Considers access to the rail corridor should continue to be by agreement. When considering access requests, NZRC balances the need for electricity infrastructure with issues such as safety, disruption to rail users, and recovering costs including a fair price for use of land. NZRC considers the situation regarding access to the rail corridor is analogous to that for motorways.

## **18. Porirua City Council**

---

Expects that any proposal to construct or maintain a line exceeding 110kV and 100MVA would be subject to a licensing arrangement with the Council. In addition, new 110kV and 100MVA lines would require a resource consent under the Porirua City District Plan. PCC would expect any resource consent or designation process to involve the road controlling authority as an affected party. The resource consent or designation would therefore have a high degree of relevance to any decision the council may make in its capacity as a road controlling authority.

Considers that access for electricity works should be subject statutory provisions related to traffic management and coordination with other utility operators in the road reserve to minimise impacts of the quality and operation of existing services.

## **19. Powerco**

---

Supports proposed amendments stating the current restrictions are not warranted by any legitimate safety or other considerations.

Notes the proposed changes would considerably enhance its ability to undertake upgrades and construction etc and would reduce the risk of added costs and potential delays. Powerco considers that separate regimes for access to roads and level crossings are not necessary.

## **20. Rodney District Council**

---

Would not support the proposals unless they address the need to co-ordinate or plan works with the council. Notes that electricity operators' rights need to be tempered with responsibilities to the environment and amenity values. Notes the difficulties with undergrounding more utilities in the road corridor (in particular the separation distances required) and suggests that in these cases the Council would favour major high voltage lines being laid in the carriage way, to leave the berm free for local services.

## **21. South Wairarapa District Council**

---

Submits that local authorities should have the right to protect their road assets and not compromise traffic safety. Also state that the interpretation of "reasonable conditions" in current legislation is difficult to implement in practice. When threatened with a challenge in Court, the Council cannot compete with the financial resources of the utility companies. Considers that the Council should have the right to impose conditions it deems appropriate and that Transpower should have no right of appeal in court.

## **22. Telecom New Zealand**

---

Requests similar access provisions for telecommunication network operators in the Telecommunications Act and/or the Railways Bill as those provided in the Electricity Act. There is no statutory process or timeframe within which to operate, therefore long delays can be experienced in negotiating access to rail corridors. Suggests a review of the current differences between the Electricity Act and the Telecommunications Act would be appropriate given that many electricity companies are using their networks to also provide telecommunications services.

Telecom expresses detailed concerns relating to safety and quality degradation of its services due to interference from electricity works.

## **23. Transit New Zealand**

---

Expresses concerns about:

- EMF issue and effect on health;
- towers vs poles for overhead cable support and their impact on traffic safety;
- arcing;
- working distances;
- cable swing (longer spans and heavier cables); and

- available roadway space for landscaping, clear space for errant vehicles to recover in, noise abatement structures/landform, and stormwater treatment.

## **24. Transpower New Zealand**

---

Supports the proposed amendments, which will materially assist Transpower to undertake planned upgrades in a timely manner, thereby contributing to continued security of electricity supply. Transpower considers the current restrictions to be arbitrary and not based on any legitimate safety or environmental considerations.

Considers that while it is usually possible to obtain appropriate RMA approval for the proposed line routes, there is a real possibility of veto by local authorities to granting consent as road owner, for line upgrades or new line proposals over or on roads. This is most likely to be the case where the RMA process has been by designation. In addition, Transpower submits that local authorities currently require significant lease or licence payments for such access.

Submits that a number of its proposals to locate lines along state highways and motorways have had to be abandoned, and that in many cases the co-location of electricity and road infrastructure would have produced a better environmental outcome.

## **25. Vector**

---

Supports the proposed amendments.

Notes that the amendment should lead to all electricity operators being treated equally. Vector sees no reason to single out “suspended works” over other works that may involve support structures. In some cases it is necessary for the electricity operator to construct and maintain support structures in the road corridor.

Submits that the definition of “road” in the Act be extended to cover railways and motorways.

Submits that there is often conflict between the RMA and other industry-specific statutes and regulations. In some cases, in order for an electricity operator to comply with the requirements of the District Plan it must breach other regulations. Key concern is that standards set by Territorial Authorities are “arbitrary” and without regard to the operational requirements of utilities, or to the use of new technology.

## **26. Waikato District Council**

---

Identical to the submission from Matamata-Piako District Council.

## **27. Waimakariri District Council**

---

Supports statutory access to airspace above and subsoil 2m below road surface, but not for structures in the road corridor. RCAs may grant access for supporting structures, and without any implied preference for locating structures in the road rather than the adjacent property.

## **28. Wairoa District Council**

---

Expresses concern (particularly related to safety) about undergrounding services in relation to other utilities in the road.

## **29. Wellington City Council**

---

Supports proposed amendments. Reasons given are:

- any alterations to bulk power transmission would be subject to a resource consent and provides the Council with the opportunity to formulate reasonable conditions for the application;
- the bulk power transmission network is not extensive (cf reticulation network) and is unlikely therefore to require work in the Council's road reserve very often;
- current practice on issues affecting the bulk power transmission network is for a process of consultation with affected landowners.

Also notes that:

- it encourages undergrounding of reticulation power lines and telecommunication lines but notes there may be acceptable reasons for this not to be appropriate for bulk power transmission. As a result they are provided for as a discretionary activity in the Council's District Plan;
- it expects bulk power transmission lines to be a certain height over the road corridor to ensure no safety risk is posed;
- maintenance of overhead lines must be co-ordinated to the greatest extent possible to ensure minimum disruption to road traffic;
- care and regard is expected for trees and vegetation in the course of maintenance of existing or the installation of new lines;
- it is up to utilities to designate the necessary corridors and deal with various landowners (Council included).