

Sections 168 169 181 189A 190 192(f) Resource Management Act 1991

To **Manukau City Council**
Franklin City Council
Waikato District Council
Matamata-Piako District Council
Waipa District Council
South Waikato District Council
Taupo District Council

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- 5 OCT 2007

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Name of submitter: **Telecom New Zealand Limited**

This is a submission on a Notice of requirement from **Transpower NZ Ltd** for a designation (**the notice of requirement**)

To construct a new electricity transmission line between Whakamaru and Auckland. The project is Transpower's North Island Grid Upgrade Project to provide for the growing electricity demand in the upper North Island. It includes the following components:

- **A new overhead transmission line from Whakamaru to Brownhill Rd;**
- **Modifications to the existing substations at Whakamaru, Pakuranga and Otahuhu;**
- **A new substation at Whakamaru North;**
- **A transition station at Brownhill Road**
- **220 kV underground cables from the transition substation to both the Pakuranga and Otahuhu substations.**

The project will cover a distance of about 200 km and crosses the areas of seven territorial authorities and two regional councils.

The specifics of the Notice of requirement to which my submission relates are **Telecom is concerned about the impact on its infrastructure, customers, personnel and infrastructure in the locality. In particular, our concerns relate to the risk of:**

- **Hazardous Induced Voltages on Telecom cables;**
- **Earth Potential Rise (EPR) Hazard from pylons;**
- **Increased EPR Hazard from the Whakamaru, Brownhill Rd, Pakuranga and Otahuhu Substations;**
- **EPR Hazard from the 220 kV cable Joint Earthing Systems; and**
- **Noise Interference to Telecom circuits.**

If any of the above issues arise they could, depending upon the level of the induced voltage or EPR cause damage to, or destroy, Telecom equipment or endanger the lives of its personnel that may be working on or using its infrastructure.

My submission is

Telecom neither opposes nor supports the Notice, but is concerned that conditions should be placed on any consent to ensure that the wind farm does not impact on its infrastructure.

I seek the following recommendation or decision from the requiring authority
That the consent authority recommends that the following conditions are placed on the Notice (designation):

1. That the Requiring Authority:

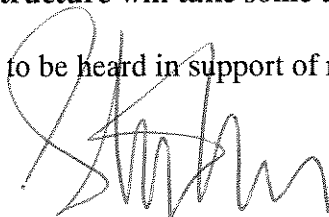
- Consult with Telecom in respect to the telecommunications and associated infrastructure that is potentially affected by the project;
- Evaluate, in conjunction with Telecom, the consequential possible induction hazard and EPR hazard to Telecom infrastructure;
- Identify, in conjunction with Telecom, the required mitigation to Telecom's infrastructure;
- The above work is recorded in a report to the satisfaction of, and provided to the consent authority. and
- Any mitigation work to be at the consent holders cost and be completed prior to the project being commissioned.

2. That the Requiring Authority:

- Provide Telecom at least one years notice of the proposed commissioning date of the project, so that Telecom can arrange to install its "noise" loggers on its most 'at risk' cables, a suitable period before the commissioning date;
- Advise Telecom of any subsequent changes to the planned commissioning date of the project;
- In conjunction with Telecom, following the commissioning and operation of the project, assess the impact of the new project on the induced "noise" levels on Telecom's most 'at risk' infrastructure over a 12 mth period;
- In conjunction with Telecom, identify any required mitigation to the project, the power network or Telecom's infrastructure, along with the timing of its implementation;
- The above work is recorded in a report to the satisfaction of, and provided to the consent authority; and
- Any mitigation work to be at the consent holders cost.

Note: Designing, supplying and installing any required mitigation to Telecom's infrastructure will take some time and it should not be left to the last minute.

I wish to be heard in support of my submission.



.....
Signature of submitter
(or person authorised to sign on behalf of submitter)

..... 4 October 2007

Date

(a signature is not required if you make your submission by electronic means.)

Address for service of submitter

Postal Address: Telecom Centre, PO Box 293 Wellington.

Telephone: (04) 382 5692

Fax/email: (04) 384 5417

Contact person:

Steven Kerr, Environmental Manager, Telecom New Zealand Ltd