
IN THE MATTER OF: the Resource Management
Act 1991

AND

IN THE MATTER OF: Applications by Mighty River
Power Limited to Palmerston
North City Council, Horizons
Regional Council and
Taranaki District Council for
Resource Consents for the
Turitea Wind Farm Proposal

**REBUTTAL STATEMENT OF EVIDENCE OF
RICHARD STEPHEN GALLOWAY**

Traffic Design Group Ltd
PO Box 30721
LOWER HUTT 5040
P: +64-4-569 8497
F: +64-4-569 2398
E-Mail: richard.galloway@tdg.co.nz

REBUTTAL STATEMENT OF EVIDENCE OF RICHARD STEPHEN GALLOWAY

Introduction

1. My name is Richard Stephen Galloway. My qualifications and relevant experience are set out in my evidence in chief. I confirm that I have prepared this rebuttal evidence in accordance with the Environment Court Code of Conduct for Expert Witnesses (July 2006).
2. I am providing this rebuttal evidence to comment on and respond to some of the primary evidence presented in respect of these applications that relate to traffic and transportation matters. In particular, I will comment on the evidence of Daniel Tate presented on behalf of Palmerston North City Council.
3. Specifically, I shall address Mr Tate's recommended conditions of consent and how they relate to those proffered in the evidence in chief of Gregory Pollock.

Consent Conditions

4. Overall, Mr Tate shares my conclusion that the proposed Turitea Wind Farm can be constructed and operated with no more than minor effects on other road users. Like mine, Mr Tate's conclusion is also conditional on a number of recommendations, which are listed in paragraph 87 of his evidence.
5. I have reviewed these, and those originally proffered in Mr Pollock's evidence in chief, and amalgamated the two in discussion with Mr Tate. The resulting set of traffic and transportation related conditions is attached to this rebuttal statement as Attachment 1.
6. The aspects where the conditions depart from Mr Tate's recommendations, and the reasons, are as follows:
 1. Mr Tate's 1(d) is carried through as condition 30.7, with the hours for trucks on Greens Road (and by default Kahuterawa Road) limited to 7:00am to 6:00pm Monday to Saturday. I consider that Mr Tate's initial suggestion of 8:30am to 4:30pm, covering both accesses, is too restrictive for efficient and timely construction of the project and, importantly, is unnecessary for road safety or

efficiency reasons. Provision is included in the suggested condition 30.7 to avoid conflict between trucks and children cycling to and from school, in consultation with the community. That may mean a limitation on trucks driving in the same direction as the cyclists during the peak 15 minute period before and after school, and might be relaxed after the initial three to four months when trucks will generally be smaller and very infrequent.

2. Mr Tate's 1(e) is carried through as conditions 30.10 and 30.11 which refer to the actual works proposed. This includes an improvement to Kahuterawa Road which Mr Tate sought in our discussions and which is shown in the attached Figure 13.
 3. Mr Tate's 1(f) is carried through as condition 31 in which I have not included Kahuterawa Road as the consent holder will not be taking on a maintenance obligation for Kahuterawa Road.
 4. I have not included Mr Tate's recommendation 5, relating to a centreline on Greens Road as I do not believe a centreline will necessarily be appropriate along the full length of the road. The portions where such delineation is appropriate should be considered as part of the design approvals under Conditions 30.10 and 32.
7. All of the other aspects of Mr Tate's recommendations have been carried forward.
8. It is my view that the consent conditions as attached provide a robust framework to ensure the transportation related effects are no more than minor.

Richard S Galloway
Traffic Design Group
5 June 2009

Attachment 1 : Suggested Traffic and Transportation Conditions of Consent

Construction Traffic Management Plan

30. At least 40 working days prior to any construction works commencing the Consent Holder shall submit a Construction Traffic Management Plan (CTMP) to the Council's Roading Manager for approval. Such approval shall be given within 15 working days of the CTMP being submitted and shall not be unreasonably withheld. The CTMP shall be prepared by a Chartered Professional Engineer following community consultation and shall cover the following matters:
- 30.1 Procedures for consultation and communication with the local community and other road users regarding traffic management issues, including establishment of community liaison groups and notification techniques such as emails, text messages, roadside notice boards, and/or newspaper advertisements;
 - 30.2 Project scheduling;
 - 30.3 Access locations;
 - 30.4 Travel routes;
 - 30.5 Traffic flows;
 - 30.6 Measures to reduce the amount of commuter traffic by construction personnel;
 - 30.7 Hours when each access will be used, including as a minimum that the Greens Road access shall not be used by heavy commercial vehicles outside the hours of 7:00am to 6:00pm Monday to Saturday, with suitable provision to minimise or avoid conflict with times when children cycle to and from school along Kahuterawa Road, as identified through community consultation;
 - 30.8 Driver protocols, including "one in one out" arrangements for heavy commercial vehicles on Kahuterawa Road during particular peak days;
 - 30.9 Management of oversized loads;
 - 30.10 Improvements to Greens Road including widening, benching for sight distance, and pavement upgrades, required to provide safe two-way movement in general accordance with Beca drawing 0848RK222 Rev A dated 24/9/2008;
 - 30.11 Improvements to Kahuterawa Road to improve forward sight distance at a location 2.9km south of SH57, in general accordance with Traffic Design Group drawing 8488-3w1 sheet 13;
 - 30.12 Road improvements required to facilitate the movement of overdimension loads;
 - 30.13 Full details of the temporary traffic management plans to be used, including the conditions under which each plan would operate;
 - 30.14 Dust suppression techniques to be used on all access roads that are not sealed; and
 - 30.15 Project contacts including a driver comments freephone number.

Advice note: It is only necessary that one CTMP will be prepared to cover roads within both the Palmerston North City Council boundary and the Tararua District Council boundary respectively.

Pavement Maintenance

31. Prior to any construction works commencing, the consent holder shall engage a Chartered Professional Engineer to undertake a road condition survey and report of South Range Road and Greens Road, with particular regard to road geometry, structural integrity and slope stability. The purpose of the survey shall be to obtain an accurate baseline of the existing road condition. The engineer's report shall include recommendations on upgrading required to ensure the roads can be maintained to a standard suitable for continuous use by other road users during construction.

Within ten working days of the completion of all wind farm construction works, the consent holder shall notify the Council's Rooding Manager so they may undertake a survey of South Range Road and Greens Road to confirm that the roads are in a condition which is the same or better than indicated in the pre-construction road condition survey and report. The consent holder shall undertake any such remedial works as are considered necessary by an independent Chartered Professional Engineer to achieve the standard recorded in the pre-construction road condition survey and report.

Rooding Upgrades

32. At least 30 working days prior to the commencement of any rooding upgrades, the consent holder shall submit engineering plans prepared by a Chartered Professional Engineer to the Council's Rooding Manager outlining details of any proposed works. Designs shall be prepared in accordance with the ARRB Unsealed Roads Manual, Guidelines to Good Practices (August 2000) or a similar standard acceptable to Council's Rooding Manager. The roads identified for upgrading are:
- 32.1 South Range Road, including widening and benching for sight distance and a new intersection with Pahiatua-Aokautere Road;
 - 32.2 Greens Road including widening, benching for sight distance, and pavement upgrades, required to provide safe two-way movement;
 - 32.3 Kahuterawa Road to improve forward sight distance at a location 2.9km south of SH57; and
 - 32.4 At locations where works are required to facilitate the movement of overdimension loads, potentially including the hairpin bend on Pahiatua-Aokautere Road 5.2km southeast of the intersection with SH57 or the intersection of Makomako Road with Pahiatua-Mangahao Road, depending on which route the overdimension loads use.

Advice note: Under the Local Government Act, the written approval of Council's Rooding Manager is required prior to any changes being made to any public road.