

MEMORANDUM | 07 October 2009

TO Helen Andrews, Chancery Green (Karen Price, Chancery Green)
FROM Emanuel Kalafatelis and Kelvin Lange, Research New Zealand
SUBJECT Proposal to Build a Wind Farm at Turitea, Mighty River Power Limited

Introduction

Counsel for the Palmerston North City Council has identified three foothill areas within the Turitea Valley that is of particular interest to it, given the reported noise and visual impacts for people living in close proximity to wind turbines.

Counsel has therefore requested that personal survey information relating to the residents living in these foothill areas and who were surveyed in the Research New Zealand Public Perceptions Survey be provided.

In accordance with the Code of Practice of the Market Research Society of New Zealand Inc., which emphasises that the anonymity of survey respondents and the confidentiality of their responses must be preserved, we are unable to provide this personal survey information.

However, working within the parameters of the Code, we have conducted further, more detailed analysis and report the results in this memorandum.

Summary

The results of our more detailed analysis may be summarised as follows:

1. Research New Zealand Survey of Public Perceptions (dated April 2009) was based on a representative sample of n=601 residents (aged 18 years or older) currently living in a catchment area within approximately 15 kilometres of the proposed wind farm at Turitea. This survey was primarily completed to provide an overview of the attitudes and perceptions of this wider population base.
2. The survey was not completed to specifically examine, in detail, the attitudes and perceptions of sub-groups of this population. That said, the survey over-sampled residents living in four areas or sub-zones; one of which comprised of people living in the Turitea Valley.
3. A total sub-sample of n=56 people were randomly selected and interviewed to represent the views of people living in the Valley to the west of the Tararuas. Given that this is a relatively small number, it is difficult to examine the attitudes and views of people living in particular areas of the Valley on a conclusive basis.



4. Notwithstanding this, counsel for the Palmerston North City Council has identified three foothill areas of particular interest. It should be noted that of the three foothill areas of interest, Foothill area 1 (the southernmost area) and Foothill area 3 (the northernmost area) are technically both within and outside of the official census defined boundary of the Valley. This is especially the case for Foothill area 3.
5. Despite this, we note that the population living in the three foothill areas of interest accounts for approximately 50 percent of the population living in the Valley, although only 1.1 percent of the total population of the catchment area of the Research New Zealand Public Perception Survey. These proportions are based on population figures provided by Palmerston North City Council.
6. Of the n=56 people we interviewed, just n=16 can be said to live in these foothill areas. Had we known this would be a particular requirement, the survey and its sample would have been differently constructed.
7. That said, we have examined, at a very high level, the opinions of these n=16 people. Of interest is the fact that, while some opposed Mighty River Power's proposal, others supported it. Specifically, n=4 or 18 percent supported the proposal, while n=11 or 67 percent opposed the proposal.
8. Furthermore, if the opinions of the n=40 other people living in the other areas of the Valley who were interviewed are examined (nb. these people represent the views of the other 50 percent of the population living in the Valley), more of these people (n=21 or 58 percent) supported than opposed Mighty River Power's proposal (n=16 or 38 percent).



Detailed results

1. The population of the Turitea Valley

Table 1 below is based on population figures for the most recent Census of Population & Dwellings (2006). This shows that the total population living in the catchment area covered by the Research New Zealand Public Perceptions Survey was 60,546.

Of this total population, the Turitea Valley population of 1,257 accounts for 2.1 percent.

The three foothill areas of interest to the counsel for the Palmerston North City Council account for 1.1 percent in total population living in the catchment area: Foothill area 1 (0.3 percent), Foothill area 2 (0.2 percent) and Foothill area 3 (0.6 percent). The three areas account for 52 percent of the total population living in the Turitea Valley.

The table also shows the extent to which we over-sampled the population of the Valley, in order to examine their attitudes and perceptions as a whole, but not those of the individual foothill areas.

Table 1: Population counts and interview numbers of each sub-area

Sub-area	Actual	Actual	Interviews	Interviews
	population 18			
	years +	(% of total)	(number)	(% of total)
	(number)			
1. Turitea Valley	1,257	2.1	57	9.5
Foothill area 1 (southern)	154	0.3	3	0.5
Foothill area 2 (middle)	143	0.2	13	2.1
Foothill area 3 (northern)	354	0.6	0	0
Other areas	606	1.0	41	6.8
2. Northern Tararuas	4,406	7.3	150	25.0
3. South-east of Tararuas	2,375	3.9	110	18.3
4. South-west of Tararuas	1,074	1.8	22	3.7
5. Palmerston North City	51,434	85.0	262	43.6
Total	60,546	100	601	100

Total may not sum to 100% due to rounding.



2. The opinions of the people living in the Turitea Valley

Table 2 below is based on the results of the Research New Zealand Public Perceptions Survey. This shows that, statistically-speaking, the same proportion of people living in the Turitea Valley supported Mighty River Power's proposal to build a wind farm at Turitea (48 percent) as opposed the proposal (45 percent).

The table also shows that, of the n=16 people living in the three foothill areas of interest to the counsel for the Palmerston North Council, n=4 of them (18 percent) supported Mighty River Power's proposal while n=11 opposed the proposal to build a wind farm in the Valley (67 percent).

This compares with the opinions of the n=40 other people living in the Valley who were interviewed (nb. these people represent the views of the other 50 percent of the population living in the Valley), of whom, n=21 (58 percent) supported Mighty River Power's proposal, while n=16 opposed the proposal to build a wind farm at Turitea(38 percent).

Table 2: Support and opposition within each sub-area

Area/Sub-area	Total sample (survey catchment area) 601 (%)	Turitea Valley 57 (%)	Foothill area			Other residents of the western Turitea Valley 40 (%)	
			Foothill areas sub-group 1-3 16 (%)	sub-group 1 (southern) 3 (%)	sub-group 2 (middle) 13 (%)		sub-group 3 (northern) 0 (%)
Support	60	48	18	21	17	-	58
Neither support nor oppose	16	7	15	0	20	-	4
Oppose	18	45	67	79	63	-	38
Don't know	6	0	0	0	0	-	0
Total	100	100	100	100	100	-	100

Total may not sum to 100% due to rounding.



Conclusion

Given their residential location, people living in the three foothill areas of interest (to the counsel for Palmerston North City Council) will live closest to the turbines of the proposed Mighty River Power wind farm. These people account for 52 percent of the population of the Turitea Valley and just 1.1 percent of the total population of the catchment area covered by the Research New Zealand Public Perception Survey.

Significantly, despite their location, n=4 of the people in the areas of interest (18 percent) supported Mighty River Power's proposal while n=11 opposed the proposal to build a wind farm at Turitea (67 percent).

Greater support for the proposal was provided by the other 50 percent of the population living in the Valley outside the areas of interest, which, in turn, resulted in similar proportions overall supporting the proposal (48 percent) and opposing it (45 percent).