
BEFORE THE BOARD OF INQUIRY

In the matter of a Board of Inquiry appointed under s146 of the Resource Management Act 1991 to consider an application by Mighty River Power Limited for resource consents to construct and operate a Windfarm at Turitea

CLOSING SUBMISSIONS FOR PALMERSTON NORTH CITY COUNCIL

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Contact: Andrew Brown

Address: Council Chambers
The Square
Palmerston North

Telephone: (06) 356 8199

Facsimile: (06) 355 4155

Email: andrew.brown@pncc.govt.nz

Introduction

1. These submissions are largely confined to legal matters.
2. The Council's participation in this hearing has been for the purpose of ensuring that there was a full examination of potential environmental effects in light of the significance of the application and to fulfill the promise the Council made to the community of a rigorous process. It seeks a decision consistent with the ethic of sustainability recognising such a decision requires expert consideration of a wide body of evidence.

Overview

3. The core of this development is the natural resources that make up the Turitea Reserve. Collectively those resources qualify as an outstanding natural feature and an area of significant indigenous vegetation. Hence s.6(b) and (c) apply. Whether or not they are recognised as such in the District Plan does not prevent them being recognised by the Court as being outstanding following *Chance Bay Marines Limited v. Marlborough District Council*¹.
4. When s.6 matters apply then in light of the words used in section 6 a central question is the extent to which the resources should be protected from development.
5. Section 6 uses the term "shall recognize and provide for". 'Recognition' suggests:
 - (a) Proper acknowledgement of the qualities of the resource; and
 - (b) Proper acknowledgement that the statutory direction concerning the management of the resource in accordance with section 6 is a national priority.

¹ [2000] NZRMA 3

The term 'provide' connotes an obligation to meet the statutory direction in the decision to an appropriate degree.

6. Section 6(c) is interesting as the direction to protect significant indigenous vegetation is not qualified by the words used elsewhere in s.6 "from inappropriate subdivision, use, and development". This means the RMA intends to effectively halt, subject to minor adverse effects justified under s.5, the decline of terrestrial biodiversity in New Zealand. In light of the significance of the Turitea Reserve and Hardings Park as the sole remaining significant biological reservoir within Palmerston North City and upon which many ecological corridors to the city rely, the Council's experts consider that substantial earthworks and development should not occur where they materially intrude into the Turitea Reserve ecosystem. Consequently, the vegetation on Game Ridge should be protected. In addition, significant adverse effects associated with vegetation clearance must be avoided. This does not preclude in itself all turbines within the Turitea Reserve especially where effects on indigenous vegetation are minor. It will inform a judgment as to the appropriate number of turbines in the Turitea Reserve and the appropriate location.
7. In relation to s.6(b) the statutory direction of preservation is qualified by the words "inappropriate subdivision use and development". In answering the question what should be preserved one must consider what the term "inappropriate" in the context means.
8. The relevant context is :
 - (a) The Turitea Reserve is an outstanding natural feature containing a component namely the skyline which is recognised as outstanding in the Regional Policy Statement and is adjacent to peri-urban development; and
 - (b) The outstanding natural feature and its skyline component is close to Palmerston North; and

- (c) The outstanding natural feature and its skyline component is not only close to Palmerston North but is its focus and signature landscape; and
 - (d) The outstanding natural feature and its skyline is not only Palmerston North's focus and signature landscape it is the only outstanding natural feature strongly associated with Palmerston North other than the Manawatu River and the Manawatu Gorge where windfarm development has already occurred; and
 - (e) The regionally significant skyline already has 15km of windfarm development on the periphery of Palmerston North.
9. The term 'inappropriate' in s.6(c) is to be considered in light of the context above. Additionally, the term 'inappropriate' is to be considered in light of the extent to which development undermines the elements that are given the statutory protection. The statutory protection is of the outstanding natural feature and the scenic skyline. Therefore development is inappropriate to the extent that it makes the feature less naturally scenic and/or makes it less outstanding. Turbines are manscape not landscape. They are not natural. Whether they are perceived as beautiful or not is irrelevant to the s.6(c) assessment as the question is the extent to which natural scenic beauty or the 'experience' of natural scenic beauty is affected².
10. Mr. Brown's distinction between an outstanding natural feature that is viewed within compared with viewed without has no statutory basis. Furthermore, such an analysis is fundamentally flawed for two reasons. First, Mr. Brown advances the proposition that the Turitea Reserve is a focal point of Palmerston North yet to say this inevitably (and correctly) postulates that a substantial part of the interior of the reserve is visible from locations in Palmerston North.

² The term experience was used by Mr. Anstey in cross-examination on the redesign and was adopted by Mr. Bray.

Second, such a distinction undermines the RPS objective that also emphasises the view without.

11. Those turbines located on the foothills on private land give rise to significant adverse landscape and visual amenity impacts on individuals as well as the wider community's experience of the Turitea Reserve because the surrounding foothills provide an important frame for the reserve and register as prominent from many locations in Palmerston North. That composition of cultural and wild landscape itself has important special landscape qualities. The Council does not accept Mr. Brown's analysis that cultural landscape features that frame more natural and wild landscapes can be simply treated as a different class such that an analysis of the experience of the whole is unnecessary. Hence, where Mr. Brown, in relation to a question from Commissioner Hudson, described the parts of the Rangitikei River scene in Ms Lucas' evidence as the river and its immediate indigenous riparian margin, he demonstrated this flawed approach which fails to appreciate other cultured but still natural qualities of adjoining land that contribute to the overall visual experience.
12. Visual impacts in peri-urban locations can warrant declining consent even if the landscapes do not qualify as outstanding and the *Motorimu* decision provides guidance on unacceptable visual impacts.
13. Mr. Bray properly acknowledged recently that 'appropriateness' is for the Board and is informed by wider considerations than simply landscape considerations. This contrasted with Mr. Brown's more recent assessment in which he, as a landscape expert, determined what was 'acceptable' without providing an effects assessment. It is important to bear in mind however, that landscape effects assume critical importance in this case and feature heavily in the evaluation of appropriateness by virtue of the provisions of Part 2 relevant in this case and the environmental context. It is for that reason that all parties have treated the case as being to a significant degree a 'landscape case'.

The Motorimu Decision

14. The decision of the Environment Court in the *Motorimu* case is important. It deals with a landscape immediately south of the subject site.³
15. The Court in *Motorimu* identified a number of factors that influence prominence of turbines. These factors were:
 - (a) distance;
 - (b) orientation of views;
 - (c) character of intervening landscape;
 - (d) screening;
 - (e) visual anchoring;
 - (f) relative elevation;
 - (g) number and extent of wind turbines visible;
 - (h) light conditions;
 - (i) atmospheric conditions;
 - (j) rotor movement;
 - (k) rotor orientation.
16. At paragraph 217 the Court said:

"[217] In assessing the effect of the additional turbines on the amenity of those who live in its vicinity we have given particular consideration to the factors identified by Mr Lister. We note that those factors in turn are very similar to the matters identified by this Court in its decision in *Meridian Energy Ltd v. Wellington City Council* (the West Wind decision)."

17. Elevation and proximity were key factors. As the Court said in paragraph 231:

"[231] It appears to us that the combination of proximity and elevation must be a particularly significant factor in assessing amenity effects in this case. To those factors we think must also be added the numbers of additional turbines which will be seen in that relatively close and elevated situation."

18. The Court noted the landscape in question was not outstanding but was significant. All experts agreed it was a special amenity landscape. At paragraph 152 the Court said:

"[152] In this instance we start from the point that the ridgeline in question constitutes a significant landscape in the Manawatu context. It is a landscape which is sensitive to change. The debate in this case is around the extent and significance of the change which the additional turbines may bring to this sensitive landscape."

19. The Court noted the concern about cumulative effects and said that it was sufficient to address cumulative effects by removing the turbines along the Te Mata ridgeline thereby retaining a gap of 13.6 km between Motorimu and Te Rere Hau. At paragraph 194 the Court said:

"[194] In terms of the wider spread of wind farms across the Manawatu landscape, the cumulative effect arising from the sequential visibility of wind farms will be created by the establishment of the consented turbines in any event. The additional turbines narrow the gap between Motorimu and Te Rere Hau by 1.1 kms, however we do not think that in the wider context in which Motorimu might possibly be seen together with the other wind farms that is significantly adverse effect in itself. There will remain a gap of some

³ *Motorimu Wind Farm Ltd v Palmerston North City Council ENC Wellington WO67/08*

13.6km between Motorimu and Te Rere Hau even if all the Front Ridge additional turbines are established.”

20. That level of separation is in contrast to the levels of separation between Te Rere Hau and Turitea Windfarm in this case. Mr Brown’s assessment of the cumulative impacts of Te Rere Hau and TWF (i.e. there is sufficient separation) appear to be less consistent with the Court’s approach in *Motorimu* and Mr. Bray’s assessment more consistent.
21. In assessing visual effects on properties within the high impact zone of visual influence, the Court noted that drive by assessments, rather than actual visits, were inadequate; it was necessary to gain an appreciation of the orientation of properties, their existing patterns of vegetation and the activities likely to occur around the property. At paragraphs 223 and 224 the Court stated:

“[223] In undertaking his assessment of visual effect of the wind farm Mr Lister considered the orientation of the dwelling houses situated within approximately 5 kilometres of the wind farm site. His assessment of orientation (contained in Appendices 1 and 1A of his evidence) was largely based on drive-bys and aerial photographs rather than actual visits. It is clear from Mr Lister’s Appendices 1 and 1A that the vast majority of the houses which he considered were orientated in a generally northerly direction largely away from the wind farm. However we consider that he considerably overstated the effect of this orientation as a mitigating factor in this particular area.

[224] One of the features of the residents’ evidence was the extent to which many of them undertook activities around and enjoyed all parts of their rural/residential properties. A further aspect was the enjoyment of 360 degree views and the views towards the hills which formed a significant feature for many residents. Although it may be that (for obvious reasons) houses are largely orientated to

the north and away from the wind farm, that is not the limit of the residents' views."

22. The Court found in relation to those turbines on the Te Mata Ridgeline the zone of high visual impact was at least 2 km. In respect of properties within that zone the Court made the following observations and findings at paragraph 222:

"[222] Even taking a very cautious approach to the various rules of thumb which the landscape witnesses have applied it is apparent from the landscape evidence that, for those living within 2 kilometres of the proposed wind farm, there is real potential for the additional turbines to become a visually dominant feature of the environment and to have a high degree of adverse effect on visual amenity. We would go further and say that the evidence satisfied us that for many of the properties within that radius such adverse effects are inevitable."

General matters of law

23. The decision of the Court of Appeal in *Queenstown Lakes District Council v. Hawthorn Estates Ltd*⁴ confirms that the off site receiving environment for the purpose of measuring effects under s.104(1)(a) RMA includes those activities that may be constructed as of right or have resource consent and are likely to be constructed. For the purpose of the PNCC assessment, PNCC has notionally assumed residential development on the sites that are already subdivided but presently empty because such development is a permitted activity. These are indicated by blue circles on the Council's 'Existing Environment Map'. (See PNCC map booklet.)
24. On the Council's 'Existing Environment Map' it will also be seen there is land zoned residential around the end of Pacific Drive that is not developed or there is no subdivision consent. PNCC accepts

that for the purpose of assessing the existing environment when measuring effects such undeveloped land should not be assumed to be notionally developed as residential land since such development requires resource consent; see *Queenstown District Lakes District Council v. Hawthorn Estates Ltd*⁵. The Council submits, however, that the residential zoning of this land nevertheless represents a relevant consideration under S.104(1)(b) RMA as the District Plan contemplates residential development in that location subject only to site specific management of the effects of development.

25. The Te Rere Hau extension has been granted consent. Applying the *Hawthorn Estates* decision the visual impacts of the Te Rere Hau extension should be treated as part of receiving environment in respect of which cumulative effects must be assessed. The Council's experts have reservations whether the cumulative visual effects of Te Rere Hau extension together with the TWF have been properly assessed by the applicant. Mr. Brown's assessment on the redesign was, on his own admission, not an effects assessment and there are no tools (such as photo montage) or explicit methodology to demonstrate the conclusions reached. Consequently, on the preponderance of the evidence, the cumulative effects have not been established to be insignificant.
26. Where matters of national importance arise, they should not be lightly dismissed; rarely do the benefits of a project override the statutory obligation to provide for these matters. As Jackson ECJ said in *Memon v. Canterbury Regional Council*⁶ at paragraph 95.
- "Part II may not provide a particular hierarchy, but it does provide a general hierarchy in which matters under section 5(2)(a) and (b) and section 6 are not easily over-ridden.
27. In the Palmerston North District Plan, windfarms like sawmills and rural industries are a discretionary activity (Rule 9.9.2). That does

⁴ [2006] NZRMA 244

⁵ [2006] NZRMA 244

⁶ C 116/2003

not mean they are expected throughout the city any more than you could say the plan expects sawmills and rural industries across much of the rural zone. They are foreseeable activities that will need to be assessed on a site-specific basis. The explanation to Rule 9.9.2 says:

"In the case of windfarms, the largely unknown effects of the activity mean that it is essential that it be examined on a case by case basis."

28. Furthermore the additional policies indicate that visual effects will be considered including effects on the landscape values of adjoining areas and that the effects of noise on the amenity of the surrounding area will be considered (see assessment Policies (a) and (b) in Rule 9.9.2). The discretionary status and assessment policies all demonstrate that any windfarm development must be fully assessed as to its effects internally and externally on the receiving environment.
29. In relation to noise, Rule 6.2.6.2 specifically excludes windfarms from the general noise controls. This is consistent with the assessment on a case by case basis that the District Plan requires. The relevant part of Rule 6.2.6.2 reads:

"Noise from the following activities shall not be controlled using rules in this plan:

(e) Sounds generated by windfarm activities in the Rural Zone shall be assessed, predicted, measured and controlled by reference to New Zealand Standard NZS6808: 1998 *Acoustics – The Assessment and Measurement of Sound From Wind Turbine Generators.*"

30. The words "with reference to" in sub paragraph (e) is in the context of a rule which seeks to exclude the general noise rules rather than create a distinct rule for regulating particular activities and in its context means the same as 'have regard to'. It is directory rather than mandatory and the Board may apply the 1998 Standard, the

2010 Standard or such other conditions as the case demands as Rule 9.9.2 anticipates.

31. It is plain from all of the above that the District Plan does not contemplate the assessment of effects of noise from turbines to be adjudged against a notional baseline reflecting the general noise standards. Specific controls are demanded on a case by case basis. That is a primary reason why a baseline under section 104(2) should not be applied. In addition, windfarm noise in its character, scale and intensity has no comparability to intermittent rural production activities and therefore it is a comparison of apples and oranges. This is something the case law says is a strong ground for not applying a baseline. His Honour Bollard ECJ in *Lyttleton Harbour Landscape Protection Association Inc v. Christchurch City Council*⁷ proposed the following non exhaustive list of factors to consider when deciding to apply a baseline:

- Does the plan provide for a permitted activity or activities from which a reasonable comparison of adverse effect can conceivably be drawn?
- Is the case before the Court supported with cogent reasons to indicate whether the permitted baseline should or should not be invoked?
- If the parties consider that application of the baseline test will assist, are they agreed on the permitted activity or activities to be compared as to adverse effect, and if not, where do the merits lie over the area of disagreement?
- Is the evidence regarding the proposal, and regarding the hypothetical (non-fanciful) development under relevant permitted activity, sufficient to allow for an adequate comparison of adverse effect?

⁷ [2006] NZRMA 559

- Is a permitted activity with which the proposal might be compared as to adverse effect nonetheless so different in kind and purpose within the plan's framework that permitted baseline ought not to be invoked?
 - Might application of the baseline have the effect of overriding Part 2 of the RMA?"
32. A line of argument heard in this hearing is that lifestylers have come to the rural environment and must expect rural activities including windfarming and if a greater amenity is expected then the plan should be changed. That is a very unconvincing argument. Rural residential subdivision in the foothills close to Palmerston North has been actively encouraged by the District Plan since notification in 1994 in response to demand to enjoy the amenity in those areas close to Palmerston North. That encouragement has occurred without the plan provisions being challenged by rural landowners. The consequence is that the rural landowners have accepted the encroachment of this development and the consequence that that becomes part of the receiving environment against which the effects of any activities requiring a discretionary consent would be assessed. In other words, it could equally be said that rural landowners, if they did not want the reverse sensitivity issues created by the increasing lifestyle dimensions of the foothills, should have ensured the largely rural production character was maintained. Furthermore an element of environmental justice (as indeed in most jurisprudence) is regard to the "first in first served" principle.

Visual effects

"Developers and decision makers must carefully consider location, scale, and design that sustain important local community and landscape values for both individual and multiple wind farm developments:

The question is not just of national benefit versus local impact. Greater complexities are involved, including:

- Differing views within local communities towards the benefits of wind farms
- The importance of particular landscapes and landscape values
- The acceptability of change.

Recognising these complexities, providing for community values, and avoiding or taking care in high-value, sensitive locations are key aspects of positive wind farm development.”

Parliamentary Commissioner for the Environment *Wind Power People and Place* page 61

33. The process of fact finding in relation to the assessment of visual effects involves analysis of three elements of landscape:
- (a) biophysical features;
 - (b) sensory qualities;
 - (c) associative meanings⁸.
34. The main biophysical features of the site include:
- (a) elevated hills to sub-alpine hill country with ridges and spurs and within the Tararua Forest Park, the scenic reserve of Hardings Park and Turitea Reserve a predominance of indigenous vegetation all of which anchors the visual elements of the site⁹;
 - (b) open pastoral slopes and ridges of the marine bench sequence including Pahiatua Hill, Bryant Hill and the land within the Love property.
35. Sensory qualities include:

⁸ See Anstey SOE para 30

⁹ See Brown SOE para 57

- (a) visual dominance because of the focal nature of the Tararua Ranges when viewed from Palmerston North (Brown SOE para 56);
 - (b) the high degree of natural character within the Turitea Reserve and Hardings Park providing a sense of tranquility (see Brown SOE para 56);
 - (c) dramatic demarcation between ridges and skyline (Anstey SOE para 35);
 - (d) rural bucolic views and prominent cultural but still natural landforms including Bryants Hill and Tirohanga (Brown SOE para 56).
36. A landscape comprises more than its physical attributes but encompasses ways in which individuals and communities interact and associate with that landscape. The following is a quote from Judge Thompson in the decision *The Outstanding Landscape Protection Society v. Hastings District Council*¹⁰:
- “[46] There seems now to be consensus that *landscape* comprises more than purely visual, and encompasses the ways in which individuals and communities they are part of perceive the natural and physical resources in question. Those perceptions can be coloured by, as the Court put it in *Wakatipu Environmental Society Incorporated v. Queenstown Lakes District Council* [2000] NZRMA 59, ... social economic aesthetic & cultural conditions.”
37. Associative meanings can be determined from a range of sources:
- (a) a significant body of evidence has been provided by people who have submitted on this application and who experience the landscape as nearby residents, city dwellers or recreational users. While Mr Brown said in his 2006 assessment that associative elements are a missing component of landscape assessment (and unfortunately

absent in his own assessment in 2009) the public participation provided for under the RMA enables that gap to be filled in large measure.

- (b) associative meanings can be ascertained from community plans such as planning instruments of particular importance in this case is the recognition of the skyline as an outstanding landscape in the Regional Policy Statement;
- (c) associative meanings can be deduced from the biophysical characteristics of the site and its proximity to people as there is an accepted correlation between natural character and landscape value¹¹;
- (d) associative meaning can be obtained by effective identification of affected communities and engagement with those communities (See Anstey SOE paras 35-37).

38. It is the Council's position that:

- (a) the Turitea Reserve is an outstanding natural feature for the purposes of s.6(b);
- (b) the Turitea Reserve is an area of significant indigenous vegetation and habitat for the purposes of s.6(c);
- (c) the foothill landscapes including Bryant Hill and the Love property are highly significant special amenity landscapes and important significance also as a 'frame' for the Turitea Reserve which also have strong associative values.

39. In landscape assessment, the natural science features are an objective component to the extent that there is significant natural character and there are aesthetic values that are worthy of

¹⁰ EC W024/2007

¹¹ See for example Brown SOE para 26 and Swaffield and Fairweather research referred to in that paragraph

protection. The Environment Court said in *Browning v. Marlborough District Council*¹²:

“The experiential recognition of what is natural character and a landscape worthy of protection goes not to the matter of tasteful subjective judgment but to a recognition that the dominant land patterns on the landform consist of scrub and regenerating forest uncluttered by buildings or jarring colours, and an unencumbered land/sea interface.”

40. In relation to that passage, Judge Jackson commented in *Pigeon Bay v. Canterbury Regional Council*¹³ at para 58:

“That passage is, in our respectful view, important because it distinguishes the completely subjective aesthetic assessment from a less subjective (but by no means value-free) assessment of the ‘naturalness’ of the landscape or, in this case, coastal environment. We consider the aesthetic criterion needs to be qualified in that way by Councils and by this Court. In a sense the really difficult (political) question has been answered by Parliament – if not in the clearest terms – in enacting Part II of the Act.”

41. With respect, Judge Jackson is right. Parliament has determined that naturalness provides for people’s social and cultural wellbeing in special ways. This is evident throughout s.6.
42. Judge Jackson defined the components of naturalness in *Wakatipu Environmental Society Incorporated v. Queenstown Lakes District Council*¹⁴ and then changed them in *Long Bay Okura Great Park Society Incorporated v. North Shore City Council*¹⁵ when he said at paragraph 135:

“In *Wakatipu Environmental Society Incorporated v. Queenstown Lakes District Council* the Environment Court set out a list of criteria of ‘naturalness’. We consider that the list becomes more useful if it is modified and extended so

¹² EC, W20/97, 10 March 1997

¹³ *Infra* at note

¹⁴ [2000] NZRMA 59

that the list of criteria of naturalness under section 6(b) of the RMA then includes:

- Relatively unmodified and legible physical landform and relief;
- The landscape being uncluttered by structures and/or obvious human influence;
- The presence of water (lake, river, sea);
- The presence of vegetation (especially native vegetation) and other ecological patterns.

The absence or compromised presence of one or more of these criteria does not mean that the landscape or coastal environment is non-natural, just that it is less natural. There is a spectrum of naturalness from a pristine natural landscape to a cityscape, and a 'cultured nature' landscape may still be an outstanding natural landscape."

43. One can quibble with those criteria including the necessity for water as a criterion for naturalness since the dramatic demarcation may be created between land and sky not just land and water. On any measure the Turitea Reserve, is at the very natural end of the continuum and the foothills also display natural character.

44. The word outstanding in s.6(b) can have a number of meanings including 'exceptional' or 'special'. Judge Jackson approved of the synonyms:

"conspicuous, eminent, especially because of excellence"¹⁶

45. Perhaps another synonym is 'magnificent', a term used by Baragwanath J to describe the Turitea Reserve.¹⁷

¹⁵ Decision A078/2008

¹⁶ *Wakatipu v. Queenstown District Lakes Council* [2000] NZRMA 59 at para 82

¹⁷ *Friends of Turitea Reserve Society Inc v Palmerston North City Council* [2008] 2 NZLR 661 at para 1

46. Outstanding qualities are to be determined at a district level and whether or not a landscape was outstanding was to be determined by reference to the environment as a whole which must include its relationship to populations. The following quote from the *Wakatipu* decision is pertinent:

“[78] We also regard “landscape” as a link between individual (natural and physical) resources and the environment as a whole. It is a link in two ways: first in that it considers a group of natural and physical resources together, perhaps in an arbitrary cultural lumping as a “landscape” rather than in any ecologically significant way; and secondly it emphasizes that our attitudes to those resources are affected by social, economic, aesthetic and cultural conditions.”

47. The Regional Policy Statement for the Manawatu Wanganui region was made operative on 18 August 1998. In accordance with the criteria set out in policy 8.1 of the RPS¹⁸, the skyline of the Tararua Ranges is identified as an outstanding landscape. This is identified in policy 8.3 item (p) which reads:

“p. The skyline of the Tararua Ranges, specifically;

i. its scenic qualities provided by its prominence throughout much of the region and its backdrop vista in contrast to the Region’s plains.”

48. Dwyer ECJ in *Motorimu Wind Farm Ltd v. Palmerston North City Council*¹⁹ concluded that the provisions of the RPS protected only the highest skyline of the Tararua Ranges, not the foothills.²⁰
49. The skyline for the purposes of the RPS above the Turitea Reserve immediately south of the Pahiatua Track reveals a series of ridges and spurs which are highest points. These are summarised by Anstey in his statement of evidence as follows:

¹⁸ See S.22.3.1 at page 98

- (a) The back ridge which rises from some 400 metres just south of the Pahiatua Track to around 620 metres, and then falls to Hardings Park;
 - (b) A series of spurs running out from the back ridge, many of a similar height to the back ridge itself, A spur that run parallel with and to the west of the back ridge ranges in height between 380 and 400 metres;
 - (c) A series of ridges and spurs in the middle of the reserve that range between 300 and 570 metres;
 - (d) A series of ridges and spurs in the western side of the reserve (on private property) ranging between some 300 and 570 metres. Viewed from the Manawatu Plains these register as 'foothills';
 - (e) A long flat ridge (again on private property) above the Kahuterawa valley varying in height between 360 and 480 metres;
 - (f) And of particular prominence, a spur running down from the back ridge to a 'foothills' ridge that ranges in height between 620 metres (at the back ridge) and falls to 500 metres (on a foothills ridge).
50. In protecting the integrity and coherence of the 'skyline' it is not sufficient to limit attention to those turbines on the highest ridge but also those that are located below the ridgeline but impact on it by virtue of the visual penetration of parts of the turbine through the line between land and sky. It is also important to recognize that the landscape that makes up the skyline is framed by the dramatic interplay of ridges and spurs which make up the total landscape package from the viewers perspective. That holistic assessment of the interplay between the landscape components is supported by

¹⁹ W067/2008

²⁰ See para 118

the following passage in the decision of Jackson ECJ in *Wakatipu v. Queenstown Lakes District Council*²¹.

“When considering the issue of outstanding natural landscapes we must bear in mind that some hillsides, faces and foregrounds are not in themselves outstanding natural features or landscapes, but looked at as a whole together with other features that are, they become part of a whole that is greater than the sum of its parts. To individual landowners who look at their house, pasture, shelterbelts and sheds and cannot believe that their land is an outstanding natural landscape we point out that the land is *part* of an outstanding natural landscape and questions of the wider context and of scale need to be considered.”

Cumulative Effects

51. A leading statement on cumulative effects is that of Judge Thompson in *Kuku Mara Partnership v. Marlborough District Council*²² in the context of an aquaculture application which states at paragraphs 52 and 53 as follows:

“[52] But the definition of effect in s 3 of the Act includes ... *Any cumulative effect which arises over time or in combination with other effects ... regardless of the scale , intensity, duration or frequency of the effect ...* So if the existing activity has adverse effects, and the proposed activity also has an adverse effect, even if only minor which would add to the existing effects, then the definition requires a consideration of both. That is because the new effect will have an impact *in combination with other effects* even if its *scale, intensity, duration or frequency* is not, of itself more than minor. That would comply with the ordinary meaning of *cumulative*. It would be an exception to the *permitted baseline* concept. But only to the extent that one could have regard to existing adverse effects when, and

²¹ [2000] NZRMA 59 at para 105

²² [2005] 11 ELRNZ 466

only when, taken together with the new effect, they produce a synergetic impact on the environment.

[53] To hold otherwise would be contrary to the plain meaning of *effects* in s 3 and contrary to the purpose of the Act, as set out in s 5 – the sustainable management of natural and physical resources. If a consent authority could never refuse consent on the basis that the current proposal is the straw that will break the camel’s back, sustainable management would be immediately imperiled. It is to be remembered that all else in the Act is subservient to, and a means to that overarching purpose. Finally on this topic we point out that the NZCPS uses cumulative in the sense we have discussed:- that the effects of the proposal should be added to the effects of existing activities in the relevant environment.”

52. So in summary cumulative effects comprise:
- (g) Cumulative effects include the total effects of the activity proposed in combination and over time;
 - (h) Cumulative effects do not include effects associated with future activities requiring consent even if made more likely by granting consent; and
 - (i) In assessing the magnitude of effects and their significance one can consider the impacts of the activity in combination with existing activities where these create synergetic or accumulative impacts on environmental values.
53. In the context of a wind farm, cumulative visual effects can arise from the scale and configuration of turbines and their impact cumulatively on the landscape in addition to the impacts on the broader landscape in combination with other existing and consented wind farms.
54. Landscape impacts on the most scenic parts of the Turitea skyline from turbines in addition to those visual impacts associated with

development to the north will have a synergetic effect that is serious.

Energy Context

55. There are a number of matters in s.7 relevant to the energy context. The first is s.7(b) which relates to the efficient use and development of natural and physical resources. There is no doubt that given the high quality of the wind resource and the proximity to transmission lines the TWF proposal will involve an efficient use and development of natural resources. Regard must also be had under s.7(j) for the benefits to be derived from the use and development of renewable energy. Those benefits include:

- (a) the renewable nature of the resource;
- (b) the absence of emission of green house gases;
- (c) diversity of energy supply;
- (d) the reliability of the resource given the relatively consistent wind run in the Tararua Ranges.

56. The district and regional energy context is also relevant to the assessment of benefits. The proposed NPS on renewable energy requires regions to identify renewable resources. There is an expectation that each region must pull its weight.

57. The following paragraph in the decision of Judge Thompson in the *Outstanding Landscape Protection Society Incorporated* case is also relevant:

“[34] Achieving a balance between regional electricity consumption and regional generation of renewable energy resources is a worthy target and one that eases some pressures on the transmission system and the losses that are incurred. It also internalizes the environmental effects – the region suffers the effects but gains the benefits.”

58. The Manawatu-Wanganui region is addressing renewable energy. The recent central wind project by Contact Energy has been confirmed by the Environment Court and the decision of commissioners upheld. The Waitohora development is on appeal but it was pleasing to see recently the respective landscape architects Mr. Lister, Mr. Bray and Ms Lucas caucusing (last week) so that resolution of the landscape issues can be achieved respecting the contributions of all parties where practicable.

Ecology

59. The protection of biological biodiversity is one of New Zealand's most important tasks. As the New Zealand Biodiversity Strategy called "Our Chance to Turn the Tide" stated, the loss of indigenous biodiversity has been serious and must be halted.
60. Against this background in 2003, Parliament amended the Resource Management Act. It placed a statutory obligation on territorial authorities to maintain "indigenous biological diversity" (see s.31(1)(b)(iii) RMA).
61. The "protection of areas of significant indigenous vegetation" is a matter of national importance under s.6(c).
62. The theme of protection also finds expression in objectives 9 of the Operative Regional Policy Statement.
63. Sometimes there are debates as to what constitutes significance. The case *Minister of Conservation v. Western Bay of Plenty Council*²³ is relevant where at paragraphs 18 and 19 the Court stated:

"Importantly, in determining whether an area of indigenous vegetation or a habitat of indigenous fauna is significant for

²³ A71/2001

the purpose of paragraph (c) the area or habitat is not required of itself, or in combination with other areas or habitats, to be nationally important. Neither does its importance have to be regional in character or otherwise exceed the bounds of the planning district. Rather, it is a question of identifying and assessing (with the aid of qualified advice and assistance) those areas or habitats that are significant within the district as to require protection.

“Significant” in its context necessarily imports the notion of informed judgment as to those natural resources of the district that need to be protected. In the case of *Western Bays*, a factor in coming to that judgment is the extent to which the bio-diversity resource of the district has already been diminished.”

64. All the ecologists agree that the Turitea Reserve is significant within the meaning of s.6(c). It is part of a single eco-system with various stages of regeneration and different strata in part reflecting exposure to climate and elevation.
65. Protection means protection from harm. In that respect the Council endorses the article by Mr Shaw and 6 other ecologists in the *Journal New Zealand Ecology*²⁴ where in the conclusion at page 10 it is stated:

“The idea that New Zealand can maintain its biological diversity while continuing to draw down its already depleted stock of indigenous ecosystems has no foundation in ecological science. For local authorities to fulfill their RMA function to provide for maintenance of indigenous biological diversity, they would need, for a start, to halt the ongoing clearance of indigenous vegetation and loss of habitats of indigenous species. This means capping loss at current levels. In significance assessment, this would require a simple general rule such as the following: ‘remaining indigenous vegetation and habitats of indigenous species are

²⁴ Walker *et al* “Halting Indigenous Biodiversity Decline – Ambiguity, and Outcomes in RMA assessment of a Significance” *New Zealand Journal of ecology* (2008) 32(2)

significant'. If the intent is to allow biodiversity decline, but merely to slow the rate of decline, then the local authorities would need significance criteria that are broad and inclusive. Such criteria would neither set high bars nor include irrelevant qualifiers. They would need to be inclusive enough to recognise the national importance of a diverse range of remaining indigenous vegetation and habitats of indigenous species, including the highly modified and the relatively pristine, the seral and primary (old growth), the dynamic and changing, different patch sizes and configurations, those species that are still apparently common and those in all stages of decline."

Eco-Park

66. The applicant makes reference to an Eco-Park as a positive effect of the proposed application. This in its AEE is on the basis that MRP will pay some royalties to PNCC based on the electricity production of the wind farm. It is PNCC's intention to utilise any such royalties in pest-control and re-vegetation of areas formerly in production forestry.
67. The Eco-Park cannot constitute formal mitigation or qualify as environmental compensation because any such development of the Eco-Park is in the hands of the Council, not the consent holder.
68. There is no contractual obligation on the Council to develop the Eco-Park. The Turitea Windfarm Development Agreement dated 30 September 2005 obliges MRP at clause 7.1(a) to "assist Council in developing the Eco-Park", but there is no contractual duty on Council to develop the Eco-Park.
69. In regard to the Eco-Park proposal, the following statutory material is relevant:
- (a) Sections 78 and 80 of the Reserves Act 1977. Section 78 requires all money received by way of rent, royalty or

otherwise in respect of dealing with any reserve, to be applied for the purposes of this Act. Section 80 requires the administering body to apply any revenue from the reserve in maintaining, protecting, improving and developing “the reserves under its control”. Revenue from TWF may be spent on any reserve administered by PNCC.

- (b) Section 104(1)(c) of the Resource Management Act 1991 says that the consent authority must have regard to “any other matter the consent authority considers relevant and reasonably necessary to determine the application”. It is submitted that the Board can take into account, as a relevant matter, the existence of the current City Council resolution that states its unequivocal intention to apply revenues for ecological enhancement within the Turitea Reserve. The matter of weight to be placed on the Eco-Park concept is for the Board.

70. Of course the Eco-park concept is a two-edged sword. It is contemplated that increased access will be available to the Turitea Reserve and this is provided for in the amendments to the Reserve Management Plan. This counts as a significant factor in preserving the internal outstanding qualities of the Turitea Reserve in large part as the attraction will not be the turbines which can be viewed elsewhere from public locations further north but the natural beauty of wild nature.

Economics and Commercial Viability

71. The 4th schedule RMA states:

Subject to the provisions of any policy statement or plan, an assessment of effects on the environment for the purposes of section [88] should include –

- (a) A description of the proposal

(b) Where it is likely that an activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity

72. In *Maniatoto Environmental Society Incorporated v. Meridian Energy Limited*²⁵ Judge Jackson relied on s.88 and the 4th schedule to conclude applicants must consider alternative locations for wind farming. That approach is not one the Council supports or advances to the Board as such an evaluation is unduly onerous for an applicant and highly speculative. However the Council does submit that alternative locations or methods of undertaking the activity within the site is very much necessary under the RMA where there is significant adverse effects involving resources of national and regional importance. In such a case one might expect an evaluation of at least three scenarios for wind farm development;

- (a) A high impact scenario (say the present proposal)
- (b) A medium impact scenario(half the reserve)
- (c) A low impact scenario(say turbines in the Baker acceptable envelope)

73. Such an evaluation would be comparatively straight forward and would also enable a cost benefit assessment including evaluation of the broad economics of applying each option based on industry experience without disclosing commercially sensitive information.

74. Such an exercise would enable a meaningful assessment of the options within a particular context by the community and the decision maker. The presence of such information makes reasoned assessment of the renewable energy options by the community impacted possible rather than being limited to the option the applicant chooses to present. This is fundamental to achieving sustainable renewable energy that respects and carries along the

community. The Board will have noted that the Palmerston North community is concerned with sustainability. It does not accord the Board or the community sufficient respect that claims of viability are made unsubstantiated by evidence and potentially a cloud of uncertainty in the mind of the community as to whether or not such claims influence the decision.

75. It is submitted that the Board should declare the time finished when applicants' counsel can make statements on behalf of their clients of an unsubstantiated nature regarding the necessary size of enormous wind farms for financial viability as justification for the imposition of significant effects on communities and nationally and regionally important resources without public assessment of the broad economics and alternatives. Such claims had no effect on the determination of the *Motorimu* application and in this case the resources are even more significant.
76. MRP's opening submission on the redesign emphasised the purchasing problems of MRP compared with other generators with an established track record. Matters of that nature are irrelevant.²⁶

Noise

77. Analysis of noise effects like any effects involves risk prediction and where feasible, ascertaining probabilities of potential effects.²⁷
78. Risk predictions relating to noise seem to fall into 5 categories.
79. The first category is that the impact on amenity of applying NZS6808: 2010 (the standard) including SAC penalties results in greater annoyance and amenity loss than predicted. The standard assumes that it is sufficient to provide reasonable amenity and

²⁵ ENC Christchurch Registry C103/2009

²⁶ Matters of viability to individual entities is irrelevant see Greig J in *NZ Rail v. Marlborough District Council* [1994 NZRMA 70, 88(HC) and affirmed in *Maniatoto Environmental Society Incorporated v. Meridian Energy infra* at para 227

²⁷ See *Long bay Okura Great Park Society Incorporated v. North Shore City Council* ENC decision A708/2008.

avoid sleep disturbance. The anecdotal evidence does not necessarily support this view. In particular;

- (a) Despite Te Rere Hau apparently complying there are 283 complaints;
- (b) Makara also has experienced significant complaints but some of those arise from potential non compliance; and
- (c) Mr. Baines has identified an increase in noise observation between the 2005 and 2009 surveys he facilitated and with non Ashhurst residents a markedly lower level of no change responses and 22% increase in worsening noise experience;²⁸
- (d) The experience of residents near Te Rere Hau who gave evidence to the Board of significant adverse effects despite the predictions of acoustic consultants.

80. There is some cause for doubt whether NZS6808:2010 is an improvement for potentially affected residents in New Zealand generally, and is certainly a retrograde step for Palmerston North residents in areas with low background noise levels since the District Plan does not identify areas as a high aural amenity areas.

81. The following observations are made:

- (a) Dr. Childs confirmed that the standard was intended to be informed by experience in New Zealand with large windfarms when determining the appropriate balance yet he confirmed that no acoustic data sets correlated to complaints from large windfarms were relied upon; and
- (b) The only material change was to the high amenity area provision. This provision could not be understood by Mr. Day or Professor Dickinson. Dr Childs said that this was the most contentious area and the committee's position was adopted

²⁸ See Baines SOE para 2.6.9.

in response to undue complexity in the Makara conditions that sought to preserve high amenity acoustic envelopes around residential properties. This led to a rather simplistic option chosen by the committee of a wind speed threshold which did not appear to be supported by any data from windfarms. This therefore represented a dilution of the site specific conditions considered necessary to preserve amenity in the Makara case and appears to favour the wind industry when the Makara decision involved a very public and intensive process of examining and mitigating effects; and

- (c) The high amenity area standard is now only intended to apply in high amenity areas identified in the District Plan when the standards committee, if properly informed, must have understood that most District Plans in rural areas do not provide for them as high amenity areas and yet they can have high aural amenity and can be highly populated. Surely a better approach and one more effects based would relate to the nature and extent to which highly noise sensitive locations are located proximate to the proposed windfarm;

82. There is some doubt also that the standard is a robust document:

- (a) How the acoustic high amenity envelope is to be calculated arises from a correlation between wind speed at hub height and background noise at the noise sensitive location and there is dispute as to the correct approach to calculating the regression curve leaving to one side the sufficiency of the methodology in general terms; and
- (b) There is no clear evidence to support the thresholds for special audible characteristics as being the correct triggers for annoyance and those special audible characteristic measures are either 'interim' or involve words such as 'regularly' 'appropriate' and 'reasonable' that create substantial uncertainty.

83. The second category of risk is that modeling errors mean that turbines cannot meet the standard or are more likely to reach the threshold in the standard. This has several consequences;
- (a) first there maybe more turbines that are either unable to be constructed or more marginal than anticipated; and
 - (b) being closer to the threshold more turbines are at risk of exceeding the standard; and
 - (c) there is a more extensive catchment than predicted of amenity loss associated with the 40dBA (L90) limit.
84. The third category of risk is that predictions of cumulative effects of noise from the proposed and present wind farms are inaccurate based on:
- (a) Inaccurate predictions of the noise transmitting wind directions of existing wind farms; and
 - (b) Failure to acknowledge the cumulative effect of creating more wind directions where loss of amenity is experienced.
85. The fourth category of risk is that the incidence of non compliance as a result of mechanical defects is greater than predicted. Even if the offending turbine is eventually shut down the probability of interrupted sleep is a function of the number of turbines and the likelihood of sub optimal mechanical performance.
86. The fifth category of risk is that identification of the source of the noise problem is delayed or cannot be isolated early. Factors influencing this category of risk include:
- (a) The existence of more than one wind farm in close proximity; and
 - (b) An enforcement agency that lacks the resources or skill to manage complex issues relating to noise effects from multiple wind farms.

87. Standards are not to be slavishly followed, see *McIntyre v. Christchurch City Council*²⁹. That decision was approved in the *Motorimu* case at para 325. The obligation of the Board is to consider all the evidence and make an assessment of the potential effects.

Conclusion

88. At the start of this hearing the Council recommended in its opening that the Board listen carefully to the community as within it there is considerable wisdom on matters relating to sustainability in the context of this application. It would seem that this has been well justified by the quality of presentations by all submitters.
89. Thank you for your attentiveness to the evidence and the Council wishes you the best in your deliberations.

²⁹ 1996[NZRMA 289].

