

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of a Board of Inquiry
appointed under Section 146

REGARDING An application for Resource Consents by
Mighty River Power Ltd to construct, operate
and maintain a windfarm at Turitea,
Manawatu

Evidence of Di Lucas

22 May 2009

INTRODUCTION

1. My name is Diane Jean Lucas. I am a landscape architect and director of Lucas Associates Limited, a landscape planning, design and management practice established in Canterbury 30 years ago. I work throughout New Zealand.
2. I hold a Master of Landscape Architecture in planning (1994), a Bachelor of Science, am a Fellow of the New Zealand Institute of Landscape Architects (1987), and, a Registered NZILA Landscape Architect. I am a member of the New Zealand Ecological Society.
3. My team has prepared land and ecosystem frameworks for various parts of New Zealand. I have undertaken region, district wide and local landscape assessments for various parts of New Zealand. I have identified outstanding natural features and landscapes in a number of regions, districts and locations and undertaken effects' analyses. I have developed criteria for and undertaken heritage landscape assessments, including with and for iwi. I have analysed and assessed natural heritage values. I have also prepared plans for lands administered under the Reserves Act 1977.
4. Two projects I managed were the only recipients of the New Zealand Institute of Landscape Architects premier landscape planning awards between 1995 and 2005. I received the NZILA Gold Award 2008 for landscape planning.
5. Since 1990 I have chaired the Nature Heritage Fund, a contestable government fund for the voluntary protection of indigenous ecosystems on private land. To date the Fund has enabled protection in perpetuity of some 340,000 ha through New Zealand, in reserves and covenants that are variously under government, council, community and private ownership and management.
6. I have been asked by the Tararua Aokautere Guardians (TAG) and Friends of

Turitea Reserve (FOTR) to assess and provide a statement of overview evidence regarding landscape values and the effects of the proposed Turitea windfarm. I am somewhat familiar with the Manawatu having undertaken various projects there over the last fourteen years, within Horowhenua and Tararua Districts and Palmerston North City, including several projects for iwi. I visited to assess the Turitea proposal with the applicant's assessment material on 14 May 2009 and fieldwork has been constrained by weather.

7. I have read, and agree to comply with, the Code of Conduct for Expert Witnesses and unless otherwise stated, all my evidence is within my expertise.

Proposal

8. Mighty River Power has applied to construct up to 122 turbines on the northern Tararua Range, within 127 sites. The proposal straddles the Palmerston North City boundary with Tararua District, within the Manawatu-Wanganui Region. The proposed turbines have up to 80 m high tubular masts and three 45 m long blades, thus up to 125 m high from ground level to blade tip. Each turbine would be located within 100 m of an identified site on a 50 m x 25 m platform.
9. 35 km of new roading plus 24 km of upgraded roading would be required, initially 10 metres wide, reduced to 7m wide later.
10. Some 11 km of transmission line would be constructed. 6 km of 220 kV transmission line on 20 pylons are proposed, including lattice towers up to 56 m high, would be constructed through the Turitea Reserve to connect the two proposed substations.
11. The site involves a 14 km length of the summit and foothills of the northern Tararua Range, primarily the Turitea Reserve, a 3,500 ha. Palmerston North City Council reserve from which 60% of the City's water is sourced. The construction would also be alongside Hardings Park, a Scenic Reserve, and the northern end of the Tararua Forest Park. The protected areas join around Marima, on the summit of the range.

12. The proposal involves up to 114 ha of site clearance, including 25 ha of vegetation clearance within the Reserve, 1.5 million m³ of cut is proposed, and 600, 000 m³ of fill.

AMBIT, METHOD & INDEX

13. I have reviewed evidence provided by Mighty River Power (particularly of Stephen Brown and Allan Wyatt with regard to landscape analysis and visual effects); background documents referred to; my colleague Shannon Bray's evidence with regard to effects on amenity values; and, utilizing my own background knowledge, undertaken some fieldwork and further investigations.

- Landscape resource para 20.
- Landscape context para 24
- Statutory context para 56
- Effects of windfarm para 109
- Cumulative Effects para 157
- Conclusions para 174

14. I conclude that the windfarm would be inappropriate

THE LANDSCAPE RESOURCE

15. Considering Part II matters, landscape needs to be addressed with respect to s.5 of the RMA, as well as consideration of outstanding natural landscapes as per s. 6(b), and amenity values in s.7.

16. Judge Jackson identified (NZRMA 59 WESI v. QLDC para. 70) "*We consider it useful to consider "landscape" as a large subset of the environment" " We have already observed that 'landscape' involves both natural and physical*

resources themselves and also various factors relating to the viewer and their perception of the resources." and, (para. 78) "*We also regard 'landscape' as a link between individual (natural and physical) resources and the environment as a whole.*"

17. The landscape resource is important for social, economic and cultural well-being. The sustainable management of the landscape resource must be considered alongside the sustainable management of the natural energy resource.
18. The NZILA statement of philosophy is that "*The landscape reflects the cumulative effects of physical and cultural processes.*" Analyses of physical and cultural processes are therefore necessary to understand and assess landscapes and landscape effects.

LANDSCAPE CONTEXT

19. Mr Brown describes (para. 9 – 12) the landscape context and existing environment which I seek not to repeat. Mr Brown identifies (para. 20) that the proposal involves the main spine of the Tararua Range. He suggests the setting is "cut-over" and cut-over 'bush' and many of the turbine sites restricted to lower level shrub species and in para. 15 he acknowledges the environmental gradients and conditions which limit forest development. Mr Brown notes (para. 18) the almost seamless junction between Turitea Reserve and Tararua Forest Park. The LCDB 2 map (attachment 11) shows the general extent of native cover within and beyond the protected areas. Mr Shaw's mapping is confined to the Reserve.
20. Mr Brown provides a sub-regional assessment of landscape values. I have considered the Tararua Range location and its context and assessed it with regard to the "accepted landscape criteria" or factors, as listed by Mr Brown at footnote 5:

- **natural science** factors - the geological, topographical, ecological and dynamic components of the landscape;

- its **expressiveness (legibility)**: how obviously the landscape demonstrates the formative processes leading to it;
- its **aesthetic** values including memorability and naturalness;
- **transient** values: occasional presence of wildlife; or its values at certain times of the day or of the year;
- whether the values are **shared** and **recognised**;
- its value to **tangata whenua**;
- its **historic** associations.

I make comment particularly on those dimensions not addressed by colleagues.

NATURAL SCIENCE

NORTH ISLAND 'BACKBONE'

21. Central New Zealand involves basement rocks from the Tararua Ranges down to Mount Cook that are gradually rising. Alongside Palmerston North, the axial ranges through the North Island are very narrow (see attachment, graphic of NZ). Natural science and cultural heritage both refer to this axis that is the structural core as the “backbone” of the lower North Island.
22. On its eastern side the axial range is bound by the abrupt fault-line scarp of the Wellington Fault (attachment 26, plate 11.4). The fault scarp to the west is less evident due to the influence of marine processes land system model (*A Land System Framework for the Dune Lakes – Manawatu*, Lucas Associates & Ian Lynn, Landcare Research, 1997. sample map and model, attachment 10). The axial ranges were formerly submerged and emerged as the coastal boundary. This is evident with the marine benches cut into the flanks of the ranges (attachment 26, Figure 11.2 A). The Manawatu River formerly flowed across and directly into the Manawatu estuary. As the ranges rose and sea level lowered the river cut down to form a dramatically incised gorge. The Manawatu Gorge is recognised as of geomorphologic significance¹ (attachment 26, Figure 11.2 B). The steep 30 m high channel sides cut down in the last 50, 000 years are clearly evident in the cross-section and on any drive through on the highway – *“upheaval has recently been, and probably*

¹ Kenny & Hayward. 1996. see mapped attachment 3.

still is, in progress.”² I support recognition of the Gorge as an outstanding natural feature.

23. As evident in the cross-section (attachment 26, Figure 2B), south of the Gorge the Tararua Range summit is rather flat, lying at between 400 and 500 m asl. As originally noted by Adkin (1930³) where the axial range is narrow and the crestline sags down to 600 m in a saddle veneered with marine strata, the Manawatu River breaks through the greywacke core.

‘PENEPLAIN’

24. *“The northern part of the Tararua Range near the Manawatu Gorge exhibits a summit topography of broad, cross-sectional convexity which could be an ancient surface deformed by uplift (Plate 11.2). From the gorge south to a point near the Pahiatua Track, this summit surface can be continuously traced and is little dissected by streams... The summit surface has deep residual soils and weathered bedrock up to 10 m thick in places which, when compared to other surfaces in the region, is a fair indication of its old age. This Tararua erosion surface also extends southward, although it has been arched up into an elongated dome and is much dissected (Wellman, 1948). Its elevation, morphology, and dissection are very similar to flat-topped remnants in the Wellington region, such as Quartz Hill, Mount Kaukau and Mana Island, and it may be part of the same erosion surface or peneplain.”*⁴
- The Wellington landforms have been recognised for their landscape importance.

25. A very old flat surface, traditionally interpreted as a terrestrial peneplain (or perhaps a platform shorn by marine transgression⁵), extended from southwest Wellington north along the greywacke band to the Manawatu Gorge. Most of that surface has been eroded away in ensuing millennia except for Quartz Hill in the south, some fragments in the south Tararua Range and at the north around the Manawatu Gorge. Considering the windfarm site, north from Marima displays a remnant of the ‘peneplain’ landform surface. As viewed from beyond (e.g. attachments 14 – 17), the horizontal skyline from Marima north to the Gorge is a demonstration of this ancient formation that is

² Charles Cotton. B.W. Collins ed. 1974. “*Bold Coasts*”. A H& A W Reed

³ G.L. Adkin. 1930. *The Origin of the Manawatu Gorge*. NZ J Sci Technol. 11: 353-6

⁴ J M Soons, M.J.Selby. ed. 1982. “*Landforms of New Zealand*”. Longman Paul. page 215

scarce in the North Island. South in Otago the great Waipounamu Erosion Surface forms horizontal skylines on the block ranges that are highly valued for their aesthetic (attachment 26, lower left).

26. Utilising the land type model (attachment 10), the summit lands and the lands of the hills such as Tirohanga and Te Mata (the Motorimu site) are part of the 'bounding hill and mountain slopes' component 9.

BIODIVERSITY

27. The vegetative cover of the Pahiatua Track to Arawaru landscape is very intact. The extensive native vegetation (attachments 11 and 30) demonstrates natural patterns, processes and elements. Highly intact, dense shrubland responds to the exposed elevated environment. The extensive and largely intact vegetation has important natural science value.

LEGIBILITY

28. The fault controlled range block is clearly legible, particularly from the east, with the range rising abruptly through the alluvial plains.
29. In contrast to the dissected range to the south, the 'peneplain' landform is legible north from Marima. The 'flat-topped' range has identifiable 'peaks' associated with the dissection into the surface.
30. The interesting dissection into parallel ridges is clearly legible (attachment cover and 27 on right). The length of Range within Palmerston North City and south of Pahiatua Track involves a series of long-recognised 'peaks' along the watershed separating the waters flowing east to Manga Hao River, and those flowing west to Turitea Stream and Kahuterawa Stream (attachment 9).
31. The changing natural vegetation in response to exposure and altitude is clearly legible (attachment 30).

AESTHETIC

32. Various landscape studies have identified the important naturalness of the Range, with very extensive natural landforms with natural landcover. For the

⁵ Ian J. Graham. ed. 2008. "A Continent on the Move" Geological Society of NZ & GNS. page 135

full length from Pahiatua Track to Arawaru, the elevated range lands are uncluttered by structures or significant artificial patterning.

33. The Opus study assesses the upper Tararua Range, landscape unit 19, to have “high natural landscape values” in terms of aesthetic and recognition. From the plains either side of the range, the broad, ridged summit lands, forest clad, provide very important aesthetic value. The skyline, the junction of land and sky, has been formally recognised as an aesthetic landscape value.
34. The valleys and hills fronting the range provide a transition into and up to the Range landscape, so that discovery of the quality and extent of the natural landscape above is memorable.
35. The city of Palmerston North has been laid out in a grid formation with streets oriented directly to the Tararua Ranges between the Pahiatua Track and Arawaru (attachment 13). The vistas to the range provides very important aesthetic value to the city environs (e.g. attachment 18).
36. Many city sites enjoy the ranges view (e.g. attachments 14 – 20). The ranges provide the overall identity and character, and the most evident natural ‘touchstone’ for those in and around the city (e.g. attachments 24-25). The elevated ranges surfaces and skyline are also a key aesthetic attribute for those to the east.

TRANSIENT

37. The changing “moods” of the ranges, as viewed from beyond on the plains and experienced from within, is closely related to weather patterns and changing light.
38. Important sunrise and sunset values have been widely recognised for this landscape.

SHARED AND RECOGNISED

39. Various analyses and documents recognise the natural upper areas of the range and its skyline as an important landscape feature.

40. The publicly owned protected areas of Turitea Reserve and Tararua Forest Park, the oldest Forest Park in New Zealand, signify the recognised importance of the core of these lands.
41. The Scenic Reserve status of Hardings Park due to this recognition as does public interest in the management and use of the parks and reserve. Hardings Park extends up to Arawaru, the highest point in the city (attachment 17).

TANGATA WHENUA

42. As articulated by Rangitāne o Manawatu via Tāne nui ā Rangi Manawatū (TMI) the Tararua range is highly valued by tangata whenua. They identify the importance of the wairua, and the flow of mauri from the range to the whanau and hapu, then from the people back to the range in a cyclical movement, only stopping when the individual passes on into the spirit.
43. Being the heke, or ribs of the sacred fish of Maui Tikitiki a Taranga, the Tararua Range is highly valued by many hapu. The layers of traditional information speak of the sacred ribs of the fish of maui.
44. The peaks along the length of range north of the Tararua Forest Park have long been known, named and used places, for tangata whenua. Not only the peaks of the summit, but those of the foothills are recognised places in their heritage landscape. For example, in the length from Pahiatua Track to Arawaru:

400m Te Ramiha
345m Te Mairekau (Bryant Hill)
557m Te Tititea
563m Te Maramarima
602m Te Irawaru
767m Te Arawaru

45. To the west of the summit the high spurs are referred to as Nga Rarakapanga, floating ribs. The foothill lands have involved quite different uses and thus have different values than the peaks above. These being

largely used as hapu and whanau places of rest, whilst the lower lands were flooded.

46. Tirohanga was traditionally used for stellar observations, and for noting changes in the constellations. It was also a haven for those who were trapped by the flooding of the lowlands which was always a seasonal event.

HISTORIC ASSOCIATIONS

47. This landscape of the northern Tararua has long been occupied. As noted by TIM, there were peoples present before their arrival some 700 years ago, the Waiariki and Waitaha hapu, still make their way to some of their sites today to do the karakia, that to them must be done. Prior to Rangitane arriving from the north, Ngati Kura, Ngati Rakai and Ngati Pakau used these lands. Relationships with the Tararua turangawaewae remain and rituals continue in association with these lands. Ngati Kuri, Ngati Mahanga, Ngati Rahiri, Ngati Kuia, and Ngati Koata worked these lands planting peruperu, uwaha, kamokamo and taewa. These plantings were done annually on the heke down into Ngati Ira, Te Ati Awa, Ngati Awa and across into Tuhoe, Ngati Awa and Ngati Pahauwera of Ngati Kahungunu.

48. Settler heritage values have been documented, including early routes, the water supply features (from 1889) and dams (1906 and), protected areas, and, mining such as the experimental platinum mines (between 1875 and 1920) on Platinum Ridge in Hardings Park. A Heritage Trail, track data and other interpretative material recognise pakeha heritage.

49. The city association with the Range, the grid layout of the city with range vistas, may be considered a heritage attribute.

50. From my assessment, and guided somewhat by the statutory regime as discussed below, I assess that the site is within an ONL.

STATUTORY FRAMEWORK

OUTSTANDING NATURAL LANDSCAPE

51. The RPS 22.8 Objective 8 is “*To protect natural features and landscapes which are outstanding and regionally significant from inappropriate development.*” Policy 8.1 provides assessment matters for “*identifying which natural features and landscapes are outstanding and regionally significant*”.

52. Policy 8.2 requires that regionally significant natural features and landscapes which are outstanding are protected from inappropriate development. In assessing the inappropriateness of development, the effects on the values identified in 8.3 are required, while ensuring “*adverse effects of any activity on the features and landscapes are avoided, remedied or mitigated.*” I note the policy does not involve a significance threshold.

53. Policy 8.3 is “*To protect from inappropriate ... development, the specified values associated with the following features which are both outstanding and regionally significant:*

- *p. The skyline of the Tararua Ranges;*
- *q. The Tararua State Forest Park.*

Both the Range’s skyline and the Park ONLs are assessed to be affected by the proposal.

54. The methods of addressing this policy include (22.3.2) that both the Regional and the District Councils will provide for the protection of the outstanding natural feature and landscape “*when considering applications for resource consents.*”

55. The Proposed One Plan Schedule F identifies outstanding natural features and landscapes. for the Tararua Ranges the Plan notes the characteristics/values of the Tararua ranges skyline as “*visual and scenic characteristics, particularly prominence throughout much of the Region and backdrop vista in contrast to the region’s plains.*”

56. Outstanding natural features and landscapes (ONL) are to be identified at the scale of the decision-making body. That is, within Palmerston North City, and Tararua District, and Horizons Region, the protection of ONL areas identified is a matter of national importance. Of course a city, district or region may not have any such features or landscapes.

57. With no central guidance on identification of ONL areas, practice has varied widely, by practitioners, councils and courts. Some ONL areas are extensive and involve methods seeking to ensure activities avoid adverse effects. Other ONL areas are more confined and are more “no go” areas. I understand PNCC has as yet not specifically identified any ONL.

58. The RMA requires that outstanding natural features and landscapes are protected from inappropriate effects. Thus any ONL areas need to be identified if they are to be protected. I have not as yet found any such recognition in any PNCC documents.

59. In his review for the Horizons Proposed One Plan, Mr Anstey acknowledges that he prefers whole landscape management rather than differentiation of ONL. However, without recognition, protection management may not be addressed. I therefore question the practicality of Mr Anstey’s interpretation with the reluctance to separate ONL from non-ONL areas (s.42A para. 20-26).

NATURAL LANDSCAPE

60. Research utilising Q-sort assessments to understand the valuing of natural character in New Zealand has identified more wild and more cultured naturalness.⁶ Mr Brown refers to these at para. 26. The wild nature paradigm correlates with the indigenous and predominant natural elements and patterns. The ‘cultured nature’ paradigm is more accepting of exotic vegetation and productive rural uses, but shows a strong aversion to obvious signs of development and buildings or structures in the landscape. Considering pastoral slopes, the Environment Court has found that both wild nature and cultured nature are ‘natural’ in terms of considering natural character and natural landscapes.⁷

61. The environment court has interpreted naturalness under the RMA to include:

- *relatively unmodified and legible physical landform and relief*
- *the landscape being uncluttered by structures &/or obvious human influence*

⁶ e.g. *Public Perceptions of Outstanding Natural Landscapes in the Auckland Region*, Research Report No. 273, John R Fairweather, Simon R Swaffield, David G Simmons. 2004.

⁷ A078/2008 Long Bay-Okura Great Park Society vs. North Shore City Council, para. 134

- *the presence of water (lakes, rivers, sea)*
- *the vegetation (especially native vegetation) and other ecological patterns.”*

Thus a landscape certainly need not be pristine to be a “natural landscape”.

ONL?

62. Mr Wyatt states (para. 1.7) that he assesses whether the landscape qualifies as an ONL. He identifies para. 7.34 Table 1, the Forested Ranges can appear as pristine areas of pre-European landscape that are highly sensitive to change. With analysis of landscape sensitivity rather than landscape value (para. 7.26), Mr Wyatt assesses (para. 8.17) that the context landscape has high visual amenity but is not an ONL as he addresses all of the hills as one. He identifies the Forest Park as the extent of the ONL (Figure 22), and thus the proposal not within this, not requiring a s.6b assessment, even though a number of turbines are proposed close to the TFP boundary, and, that that boundary is “seamless” with other protected lands and not a landscape boundary. My assessment does not support this analysis, and it differs from that of Mr Brown.

63. Following an earlier visual effects assessment of turbines on this site, which I have not seen, Mr Brown has now provided a “*strategic assessment of the landscape surrounding the site*”, including Outstanding Natural Landscape/Feature and Amenity Landscape identification at a sub-regional scale (para. 7).

64. Mr Brown also identifies “amenity landscapes”, including no. 27 involving some 5, 000 ha of the bush-clad Tararua Range within PNC and Tararua District, and including much of the proposed development (attachment 5). This amenity landscape adjoins the Tararua Forest Park ONL. However, he interprets (para. 33) that “*“amenity” is often bound up in the identification and maintenance of values that have even more to do with qualities and dynamics experienced at the local or location specific level, than “landscape”. For instance, whereas the concept of landscape may pertain to a wide ranging mixture of open pasture, remnant bush, hill backdrop and farm buildings that create a certain bucolic imagery and distinctive sense of place, amenity values may relate to the outlook to a single hill, ridge, stand of trees, stream course or other feature that is of little significance to the wider community.*

Consequently. Amenity tends to be bound up in much more locally 'known' and appreciated elements and features, and a more subtle array of landscape patterns." Mr Brown continues (para. 34), "In the rural domain, such values often coalesce to create the very essence of rural character, i.e. a balance of natural elements, productive uses (typically expansive as opposed to intensive) and structures, which is underpinned by the enduring dominance of non human-made elements." And (para. 35) "Residential amenity is inevitably a core component of the amenity spectrum..."

65. I question Mr Brown's assessment that the largely inaccessible, 5,000 ha bush-clad summit to the Tararua Range meets this description of an "amenity landscape". It is not an area of typical rural character, not an area of residential amenity, not a little local feature. The 5000 ha elevated bush area he delineates is a natural part of the main Tararua Range natural landscape, most involving protected natural ecosystems.
66. Mr Brown suggests that *"amenity often relates to the outlook or views beyond either an urban periphery or the farm yard to key natural features, such as mountain ranges..."*. The Tararua Range undoubtedly adds to the amenity value of the rural and urban dwellers of the lands below and beyond the range that enjoy this outlook. The outlook to other ranges is similarly enjoyed, including to the Tararua Range lands to the south.
67. At para. 39 Mr Brown provides his differentiation between ONL and amenity landscapes. I have considered these definitions, his criteria and thresholds, and assess that the delineation 27 on the northern section of the range is more appropriately considered an ONL than an amenity landscape.
68. Mr Brown contends (para. 43) that his assessment is consistent with ONL and amenity landscape identification elsewhere at a strategic level. I do not agree. For example, Christchurch, a grid-city on the alluvial plains fronting the Port Hills provides some parallels. As confirmed by the Court⁸, Montgomery Spur is of similar distance and character to Bryant Hill (Mairekau). This was included within *"the (rural) Port Hills as a whole as an outstanding landscape, and that large areas of them are an outstanding natural landscape"*, that is, at

⁸ C28/2003, Stonehaven Developments Ltd v Christchurch City Council, para. 69

the City scale (photo attachment 28). I note that in the regional landscape assessment⁹, the Port Hills were also identified as an ONL.

69. The Port Hills analysis supports the Arawaru to Pahiatua Track area of the Tararua Range in general as an ONL, and perhaps would extend that delineation from the summit down towards the 170 m asl.

70. Mr Brown's ONL for the Tararua Range stops short of the peak Arawaru. Mr Brown describes the "key features" of the 'Northern Tararuas – Turitea' Amenity Landscape 27 (para. 47. Table 2) as "*Mountain landform sequence, remnant native forest intermixed with pasture and pine forestry; peripheral interplay with main body of forest park to the south.*" However the delineated area (Annexure 9, see my attachment 12, left) is almost entirely native bush, and "seamless" with further Forest Park land to the south, delineated as ONL. He has not recognised the natural values of non-forested areas such as montane summit lands and wetlands.

71. Following the broad identification of ONL and amenity landscape, Mr Brown undertook a detailed assessment of the range area associated with the site (from para. 51). At para. 54.2 he identifies the 'internal' forest landscape of Turitea reserve and Tararua forest Park. He identifies (para. 53) in the east the visibility of the forest from Marima southwards. For the west he assesses the native cover is largely screened. However, firstly, my analysis identifies that much of the forested lands are visible from the Manawatu plains. Also, as is clearly shown in many parts of New Zealand, an area need not be highly prominent from beyond to be recognised as contributing to an ONL. I do not accept Mr Brown's analysis (para. 54.2) that rural-residential development below precludes the natural lands above from contributing to the ONL.

72. With 4 existing windfarms present, I agree with Mr Brown (para. 63) that the range lands between the Manawatu Gorge and Pahiatua Track have been "*too modified to qualify as truly outstanding and natural*". Hence I assess that the Tararua ONL extend north only to the Pahiatua Track.

⁹ Boffa Miskell & Lucas Associates. 1993. *Canterbury Regional Landscape Study*.

73. I agree with Mr Brown (para. 64 - 65) that the northern boundary to the Tararua Forest Park is not a natural landscape boundary. The lands of the Park are seamless with those of the Turitea Reserve and Hardings Park. Thus it is more appropriate to extend the Tararua Forest Park ONL to at least include these contiguous protected and natural lands.

74. Mr Brown assesses that an entirely natural and visible area of the Tararua Forest Park, and the natural area of Turitea Reserve including the visited Hardings Park, are not part of the Tararua Ranges ONL (attachment 12, right). He truncates the regional ONL south of the peak of Arawaru. I consider it inappropriate to exclude the similarly highly natural, but more gentle, range lands northward from an ONL, particularly at the City/District scale.

75. Considering the RPS criteria for an ONL (Policy 8.1), the elevated lands of the Arawaru to Pahiatua Track landscape qualifies as regionally significant and forms parts of both the Tararua Ranges skyline ONL and Tararua State Forest Park ONL (Policy 8.3 p. and q). Mr Brown proposes the existing regional ONL areas be downgraded to Amenity Landscapes. Given the criteria in the RPS and other widely accepted landscape criteria, I see no justification for this downgrade. The One Plan approach (Schedule F) would similarly include this landscape. In addition, the Arawaru to Pahiatua Track landscape would appropriately be identified as an ONL at the City and District scales.

76. Mr Brown recognises (para. 72) that the various protected lands of the Forest Park and Turitea Reserve including Hardings Park could be of ONL quality. He considers that the wind farm site as a whole does not qualify as ONL. Considering the whole site (see Mac Henry Exhibit MH1), I agree that it does not qualify as ONL. However, at least the area within and beyond this site that has identified by Mr Brown as 'amenity landscape' in my opinion would more appropriately be identified as ONL, along with that of the Forest Park within and adjoining his delineation.

PALMERSTON NORTH CITY

77. The District Plan for Palmerston North City does not address the statutory requirement to protect ONL. The RPS identifies the Tararua Range skyline as

ONL, but this is not recognised at the district level. The skyline to the Tararua Range is an important natural feature of Palmerston North city.

78. Works within the city boundary have the potential to affect the Tararua Skyline ONL as experienced from Palmerston North city, Horowhenua District and Tararua District. Cross-boundary effects need to be considered.
79. The Tararua Forest Park does not extend into Palmerston North City, and thus neither does the Tararua Forest Park ONL. However, large earthworks or structures placed across the boundary in PNC can result in cross-boundary effects into Tararua District and affect the Tararua Forest Park ONL as experienced from Tararua District in the east.
80. From my assessment, considered at this district scale, particularly in terms of natural science values, legibility, aesthetic values, shared and recognised values, tangata whenua values and historic associations, the Pahiatua Track to Awararu landscape is appropriately recognised as an ONL of Palmerston North City.

PALMERSTON NORTH CITY

81. For Palmerston North City, the Boffa Miskell 1990 study identified as of greatest sensitivity the “Rural protection” and Rural/Conservation” areas. The former was that above 100 metres in elevation to the visible ridge of the Tararua Range. *“The area is visually sensitive and it is an important landscape feature and backdrop to Palmerston North City.”* However I understand that almost 20 years later the City Council still has provided no formal mechanism to address the sustainable management of this important and sensitive landscape feature and backdrop.
82. Considering Palmerston North City (PNC) the study by Opus delineated landscape types and landscape units (attachment 3). Landforms were identified as the appropriate basis for landscape analysis, as landform is the underlying framework and a constant.
83. The Discussion Document: What are the Significant Resource Management Issues in Palmerston North City?” identifies adverse landscape effects in rural areas of lifestyle blocks and windfarms. The ad hoc approach to development

and case by case assessment is recognised. There is no recognition of any landscape as a resource of value requiring protection management. The concurrent landscape study is referred to but that suggests a series of studies which suggest any formal landscape recognition would not be even considered for some years.

84. Whilst I agree with the Palmerston North City Landscape Study using a landform basis for their assessment, it is important to address both larger and smaller scales. Assessment of landscape units can overlook the value of “the big picture”. Also, with only mapping available, no modeling or other 3-D depiction, and no justification for boundary location, the landscape typology is somewhat difficult to read, understand, analyse and apply. For example, does a ‘local valley’ delineate the valley floor plus the lower slopes, or not?

85. Whilst the Study report makes no mention of the Tararua Ranges as a landscape feature at a broad scale, I note that the public consultation made this point: section 5. *“There were a number of consistent themes to the feedback: The significance of the Tararua Ranges as a landscape feature”*. Assessment of small scale landscape units as undertaken can and has completely missed this point. Whilst stating that feedback comment has been incorporated, the version published fails to recognise the scale issue identified. The Stage 2 study proposes to assign values to each landscape unit, and then Part 1 is proposed will establish the value/importance of each landscape unit which is to inform Stage 3. Then in Stage 4 each landscape unit is to have its values weighted. From the project description (section 6) it would appear that at each step of the proposed project the “big picture” is highly vulnerable to being missed.

86. A study for landscape management has to address the landscape at various scales. To meet the requirements of s.6b an assessment is required and the *ad hoc* approach being taken, through apparent consideration only at the time of applications for huge landscape change, continues to fail in this regard.

87. Whilst spatially small, Palmerston North City includes areas of nationally important natural features including the south-west of the Manawatu Gorge, the northern end of the Tararua Range, and the alluvial plain that adjoins below. The management of these as per s.6b, together with the Manawatu

River, are not, I understand, as yet addressed by the City's statutory documents. As identified by the Courts¹⁰, a landscape can be found to be outstanding whether or not it is recognised in council's statutory documents as such. I have assessed the landscape of the windfarm site and its context, and consider it would be appropriately recognised as an ONL.

88. Mr Brown and Mr Bray have each mapped landscape units similar to those in the City Council study. I refer to those of the PNCC. The PNCC landscape units are shown with the proposed turbines overlain at attachments 3 – 4. The proposed turbines are mostly located within Upper Catchment landscape, landscape unit 19, Tararua Heights.
89. Those turbines proposed below to the north (from Groups A, B, C and D) are in the Hill Slope landscape type, Forest Hill Slopes landscape unit 18. As identified in our land type analysis (attachment 10), considering their geomorphology, these slopes belong with the upper lands in the “bounding hill and mountain slopes” landform component.
90. The turbine locations predominantly within PNC landscape unit 19 are mostly visible in My Wyatt's simulations emerging from those upper slope and summit land surfaces. Thus I assess the Opus study analysis of landscape unit 19, that it is “*Not directly visible from the Manawatu Plains*” to be entirely incorrect. These surfaces are clearly visible from the city and from elsewhere on the plains, as is demonstrated on Mr Wyatt's images.
91. The Tararua District Plan (TDP) identifies 10 significant landscapes but no ONL. The RPS identifies the Tararua Range skyline and Tararua Forest Park ONLs that are within the District and identified in the TDP as ‘significant landscapes’. These regional ONL and district significant landscapes include the Turitea site lands under consideration. Up to 11 turbines are proposed within Tararua District, the eastern row alongside South Range Road which forms the City-District boundary, and Pahiatua Track (turbines 99 – 109). Other turbines on the summit will be visible above the District boundary and have landscape effects on Tararua District.

¹⁰ Chance Bay v Marlborough District Council; Outstanding Landscape Preservation Society v Unison & Hastings District Council W / 2007

92. In my opinion, the windfarm proposal should be assessed as within an ONL in terms of effects on the landscapes experienced from east of the summit.

ONL EXTENT

93. Considering the Region's character, this is the expression of natural and cultural elements, patterns and processes that both characterise an area and distinguish one area from another. *"As the Court stated in the first Queenstown landscape decision [fn22 [2000] NZRMA 59 at para (105)]: "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."*

94. Where geomorphological and pastoral characteristics are contradictory, the Court has agreed¹¹ management boundaries can be temporary. *"By comparison, the geomorphological characteristics, whilst ultimately also in flux, are relatively solid as a basis for the categorization we have to make."*

SKYLINE RECOGNITION

95. The RPS 1998 identified *"The skyline of the Tararua Ranges is the land/sky boundary as viewed at a sufficient distance from the foothills so as to see the contrast between the solid nature of the land at the crest at the highest points along the range and the sky."* This "skyline" is not mapped.

96. Mr Wyatt's photographs for CVP01, CVP02 and CVP03 show such a view from a distance some 9km seaward of the Tararua summit CVP01 reproduced on my attachment 24-25, lower). The simulations clearly show the location of most of the proposed turbines either directly on this summit or protruding up in front of it into the summit skyscape. That is, within the land sky junction identified by the RPS as ONL.

¹¹ WESI v. QLDC C73/2002 re. Mt Alpha fan, Wanaka, para. 52

RESERVES ACT

97. Many of the proposed turbines and associated works are within or closely associated with the Turitea Reserve established in 1927 as a water supply reserve for Palmerston North (attachment 7). I understand the Reserve involves a single title (Sec 2 SO 37039) for the length from Pahiatua Track south to the high point of Arawaru. An 868 ha area, referred to as Hardings Park but perhaps not with surveyed boundaries, was gazetted in 2003 as Scenic Reserve as per s.19(a) of the Reserves Act (attachment 9). The rest is a Local Purpose Reserve having the protection and management of scenic features as a “Secondary objective” (Turitea reserve Management Plan, TRMP Pt 2 1.2 Table 2).

98. The scenic values are not to be protected only for the interests of City residents or the City Council. Scenic Reserves have *“the purpose of protecting and preserving in perpetuity for their intrinsic worth and for the benefit, enjoyment and use of the public, suitable areas possessing such qualities of scenic interest, beauty, or natural features or landscape that their protection and preservation are desirable in the public interest.”* Also, *“by providing, in appropriate circumstances, suitable areas which by development ... will become of such scenic interest or beauty that their development, protection, and preservation are desirable in the public interest.”* (section 19(1)).

99. Classified as per s. 19(1)(a) Hardings Park is to enable protection and preservation of *“suitable areas possessing such qualities of scenic interest, beauty, or natural features and landscape that their protection and preservation are desirable in the public interest”*. As identified in s.2(c)

100. I recognise the applications are being considered under the RMA and the RMA is “tenure neutral”. However, in considering the Christchurch Gondola application for the Port Hills under prior planning legislation, the top gondola complex was proposed within a city council reserve formally classified as Scenic Reserve under the Reserves Act 1977. The site straddled the City and Lyttelton Borough. A reserve management plan awaited approval. An alternative location was proposed on adjoining private land.

Judge Treadwell's Tribunal found¹² that the scenic value of the reserve "*as an identifiable landmark when viewed from without and that this together with the botanical attributes it possessed placed greater emphasis upon inward looking scenic qualities*".

101. Recreational access to Hardings Park is important, with access provided up around Red Rock Knob. The TRMP recognises that the only other walking opportunity in the City is the Manawatu Gorge track.

102. The Management Plan prepared under the Reserves Act requires (Policies 3.3) the maintenance and improvement of vegetation cover and minimising of soil disturbance to control sedimentation, to protect water quality. The TRMP recognises the importance of the Reserve, containing 90% of the city's important ecological areas, to city biodiversity. The importance of the vegetation for water quality, landscape, amenity and recreation is recognised. Objective 4.5 is "*To preserve and where practicable enhance the natural landscape values of the reserve.*" That is, the task is primarily to preserve. Not to remedy or mitigate, and only "where practicable" to enhance the "natural" landscape values. This provides a very clear direction for reserve management. Considering the proposal to trade the possible benefits of other activities occurring in or around the reserve that would not preserve natural landscape values.

103. The TRMP also requires (Objective 4.7) Reserve development to "*encourage ecological corridors and linkages*" to city areas outside. The proposal involves substantial earthworks for roading and structures both encircling and within the Turitea catchment (attachment 7).

EFFECTS OF WINDFARM

104. I note the landscape architects for MRP have not addressed the Reserve Act dimensions such as the scenic protection requirements that apply to much of the site of the proposal. Considering the scenic values derived from the naturalness of the protected lands, the extensive earthworks and the very large structures proposed that would be experienced in association with the protected lands, would not protect those scenic values.

¹² W 33/88 Payeo Developments v Heathcote County Council, Lyttelton Borough Council and

105. Considering Hardings Park, views of this Scenic reserve would be adversely affected by turbines to the west, Groups F and H, to the north Groups G, B and K plus northern turbines of Group D. These turbines would be contrary to protecting the natural scenic values enjoyed of the Park as viewed from beyond. Turbines from Groups F, H, G, B K and D would also significantly affect the scenic values enjoyed from within the Park. Both the inward and the outward looking qualities of scenic interest, beauty, the natural features and landscape enjoyed in association with the Park, would be significantly adversely affected contrary to the requirement by the Reserves Act in considering protection under section 19(a).

106. I note that Mr Brown provided a contextual analysis of landscape status and did not assess the landscape or visual effects on the proposed windfarm. Mr Wyatt undertook the landscape and visual effects assessment for MRP. I briefly note effects on identified landscape values.

NATURAL SCIENCE

107. Considering the ecological values of the protected areas, the extent and integrity of the natural ecosystems, the extensive cut and fill earthworks proposed along ridges and slopes would disrupt the continuity of natural land surfaces (attachment 29, upper, shows an example elsewhere). Natural ecosystem patterns and processes are potentially affected as is the ecological integrity.

108. I note that the proposed Eco-park environmental compensation is not part of the application.

109. TRMP Objective 4.5 is "*To preserve and where practicable enhance the natural landscape values of the reserve.*" The TRMP requires (Objective 4.7) Reserve development to "*encourage ecological corridors and linkages*" to city areas outside. The proposal would reduce and not enhance ecological corridors and linkages, except in a negative way in providing for easy pest access, both plant and animal.

110. The proposed ridgeline works would disrupt ecotones and natural linkages between Ecological Management Areas E2 and E3 (attachment 9). The role of E3 lands as ecological buffers to E2 would be reduced.
111. The large-scale earthworks proposed also potentially threaten catchment integrity, an important natural science value for Turitea (attachment 29, lower). Attachment 7 indicates many of the turbines are proposed on the Turitea watershed or within that catchment. As identified in the Turitea Reserve Management Plan (3.1), the policy is “*To manage the catchment to maintain an “A” grading or equivalent for the Turitea catchment Source.*”
112. A number of proposed structures are outside the Turitea Reserve but on the watershed to the Turitea catchment and therefore earthworks potentially affect the Reserve and the water supply. For example, Groups A and K (refer attachments 1 and 7). Any pastoral management might exacerbate the effects of the substantial earthworks proposed.
113. Substantial earthworks are also proposed on the outer slopes, including along the summit and upper slopes on the eastern Tararua range flanks, within or close alongside areas of native vegetation (Groups D and E) (attachments 9 and 11).
114. The proposed windfarm development would potentially have significant adverse effects on the natural science values of the protected areas.

LEGIBILITY

115. Each 125 m high, 122 turbines are proposed to be spread along some 10 km of the Tararua Range from Pahiatua Track south to Kahuterawa Valley, and extending some 5 km across from the western to the eastern flank of the Range. This northern length of the Tararua Range is neither particularly tall nor particularly wide. It is the narrow neck of New Zealand’s axial range (attachment 27, centre). This is the northern ‘planed’ surface, not the rugged dissected summit of further south.

116. The legibility of a number of the subtle 'peaks' on the 'peneplain' landform would be adversely affected by the proposed earthworks and by the large structures. Attachment 29 (upper) indicates the detracting of earthworks from landform pattern legibility. I recognise the works are fresh, and the road widths are to be reduced. However, as shown on attachment 30, even small tracks can result in some ongoing disruption to naturalness.

117. Regarding existing local windfarms, geopreservation expert Dr Bruce Hayward said *"I was appalled when we went up there a few years ago and saw not only the windmills but the huge amount of damage to the landforms created by all the wide roads and building platforms that they had to create to get them in."*¹³ These are not landforms identified specifically in the geopreservation inventory, but the context landforms, the range lands, that significant identified features such as the faultscarps and gorge are part of.

118. The legibility of the vegetation patterning responding to exposure and altitude would be adversely affected by the earthworks and the structures.

119. Experienced from elevated public viewpoints such as Red Rock Knob in Hardings Park (556 m. asl., located between turbines 117, 118 and 048) the legibility of the summit landforms and vegetation would be significantly adversely affected.

AESTHETIC

120. The Tararua Range ridgelines and skylines provide a very important natural landscape value to Palmerston North city and the rural plains. For all 14 of Mr Wyatt's public viewpoints, whether experienced from east or west, the proposal involves a plethora of large structures on the ridgelines intruding into the skyscape of the Range.

121. The effects of the numerous, large and overlapping structures would be to detract from experiencing the range lands as a landscape feature. Instead the land would for many read as a plinth for the kinetic structures above.

¹³ pers.com. May 2009

122. The detail, complexity and subtlety of the multiple ridgelines and subtle peaks would lose their appeal with the distraction and detracting of the large kinetic structures. Turbines located on the western slopes to the Range, for example many of the A, B and C Group turbines in attachment 24, lower, such as 82, 85, 84, 75, 73, 70, 69, 94, 95 and 96, whilst not located on the main ridgeline they would adversely affect the aesthetic value of the Ranges skyline. As found with field-testing of smaller turbines, at the 9 to 10 km distance, the landscape effects on the aesthetic value of the natural range skyline would be significantly adverse. In addition, further structures visually overlapping them would exacerbate the skyline effects.
123. The 125 m high light-coloured structures frequently observed overlapping behind and above one another, would, from out on the plains, read together as a complex mass of structures (attachment 24, lower). The elegance that might be enjoyed of individual structures would be significantly diminished by the complexity of the turbine mass, with rotors viewed overlapping, moving at different speeds and not synchronised.
124. Where viewed with a background of land, the visual effects of the contrast of the pale moving structures against darker land surface can have a stronger visual effects than those viewed in silhouette in that light.
125. A row of turbines is proposed along the main ridgeline of the Tararua Range, (the range watershed, see attachment 8) from turbine 01 in the north above Pahiatua Track to turbine 046 by Red Rock Knob.
126. The city of Palmerston North is laid out in a grid pattern with one set of streets oriented directly to the Pahiatua Track to Arawaru length of the Tararua Range (attachment 13). These streets provide important vistas to the Range lands (attachments 18 – 23).
127. With the location and scale of the turbines as proposed, the aesthetic value of the street vistas would be very significantly affected by their very evident presence. The aesthetic of the vista design with landform terminus, would be significantly affected by the scale and elevation of the structures clearly visible on and above the land. Attachment 18 shows 10 turbines proposed north of Marima across the vista terminus (21, 22, 23, 24, 25, 26,

27, 42, 43 and 133). Turbines 21 to 27 are located on the main ridgeline to the Range (attachment 8).

128. Attachment 13 and street viewshed maps (attachments 19 – 23) indicate that almost the full length of the proposed windfarm is a very significant issue in terms of aesthetic effects. For each viewshed, turbines on the main summit ridge would have significant adverse effects.
129. The Fitzherbert Avenue viewshed (attachments 18 and 19) shows turbine 22, which is located more than a kilometre north of Marima in Group D on the main summit watershed (attachment 8). Contrary to the analysis in the Opus study (2008) regarding the visibility of the unit 19 lands (attachment 4), these sample turbines are useful locaters to demonstrate the visibility of these lands from city vistas.
130. For other sites such as open parks and multi-storey buildings, the full expanse of the proposal could be visible. The double-spread panoramas at attachments 14-15 and 16–17 are examples of the broad views of the Ranges that city vantage points enjoy. The full expanse of the windfarm would be clearly visible from such viewpoints. From the public hospital there is a valued outlook to Tirohanga. I assess the effects of the proposal would be highly significant on all these city views of the Range.
131. The aesthetic value of the ONL of the Tararua Range to Palmerston North city would be significantly affected by the proposal. The naturalness and memorability of the Range would be very significantly affected by the plethora of turbines proposed.
132. I understand that strategic planning effort involves encouraging expansion of the built city across the Manawatu River toward the Tararua range to avoid the Class 1 soils and flood-prone lands in other directions. For example, Summer Hills shopping centre, Aokautere, educational complexes and Pacific Drive. From within new residential areas, such as Pacific Heights where I understand there are some 700 further sections to sell, there are clear views to the proposed turbines. Mr Wyatt shows an example from Pacific Drive, RVP2, 3 km from the closest of many turbines. RVP22a, RVP22b and RVP22c indicate a plethora of turbines, as close as 2.17 km.

The proposed turbines would influence the relationship of future residents with the Range.

133. For people recreating in Hardings Park, the effect of large moving structures in close proximity around Red Rock Knob would affect the experience. People enjoy views from Red Rock Knob (556 m. asl, located between turbines 117, 118 and 46) over Browns Flat and back to Palmerston North City. Turbine Groups F, G, H, J and K would very significantly disrupt this experience. The turbines would also affect the visual relationship enjoyed between Hardings Park and the Turitea catchment, as it would be experienced as encircled by turbines and the ridgelines disrupted by earthworks.
134. East of the Range the proposed double row of turbines along the summit would be widely visible (e.g. Wyatt public viewpoint 10 from SH2). The aesthetic value of the Tararua Range skyline and summit, and the integrity of the northern area of the Forest Park, would be significantly affected by the proposed structures.
135. Around and south of Marima, 8 of the D Group turbines are close to the Tararua Forest Park boundary plus T 043 of the E Group at the head of Inglis Road. People view and access the Park across private land. The turbines high on the slopes would affect the naturalness of these views.
136. The large scale of the structures means that natural features are visually compared and are dwarfed, their subtleties belittled. I have observed the Te Apiti and T3 turbines on the ranges on many occasions and recently the Te Rere Hau two-bladed structures currently being erected. From the Palmerston North airport the 105 m high Te Apiti turbines some 15 km away provide a useful guide. I have heard expressions of considerable surprise from arriving passengers at the visual effects experienced. The 20 metre taller Turitea turbines proposed would be at least as visible.
137. Palmerston North is proximate to 6 consented windfarms highly visible from around the city. The existing windfarms are not located at the termini of the street vistas (attachment 13). The existing windfarms are generally located away from the main vistas. However, the proposed farm would be

entirely and prominently in line with street vistas and be very visible from the city.

138. With so many structures already built or consented, there would not be the novelty value in those proposed that there was with earlier windfarm developments.

139. I assess that the important aesthetic values of the Tararua Ranges, including of the skyline, would be significantly adversely affected by the proposed windfarm. The naturalness and memorability of the Range landform would be significantly affected.

TRANSIENT EFFECTS

140. The value of the slopes and skyline to the Tararua Range through different light conditions is widely recognised. The differing effects at sunrise and sunset, the differing effects when faces are in sunlight and in shadow, the differing effects when clouds gather, when swathes of mist move over, when fog lifts. From around the districts, the view to the Range provides an important measuring place to 'read' conditions, to get the feel of the day or night.

141. The appearance of the proposed turbines would also vary with conditions. Whether backlit or frontlit, whether merging from cloud, whether blades glisten from moisture, whether turning or still. The pale of the structures, whether sharply or faintly contrasted with land or sky beyond. Whether turbine rows read as closely jostling in clear light or more separated in less. I have been surprised at the range of weather conditions within which the structures remain highly visible at distances of more than 10 km.

142. The visual character of the turbines, being large open structures of vertical form in contrast to the horizontal land patterning, the solidity of land, and the naturalness of land; coupled with their ever-changing kinetic character, means they attract attention. The turbines would compete with the transient values of the natural dimensions of the Range lands.

143. For people experiencing the turbines when backlit and at closer distances, evident shadow patterns across land or buildings, or through homes, could have significant transient effects.

144. I assess that the proposed structures, their location, scale and multiplicity would result in very significant adverse transient landscape effects. These will significantly affect the appreciation of the Tararua Range landscape.

SHARED & RECOGNISED EFFECTS

145. The identity of the Manawatu and Palmerston North is already associated with wind turbines. This will be considerably increased with the proposal, with the scale, extent and proximity of the turbines, and their location in the city's Range vistas.

146. An extensive area of the rural lowlands that enjoy views to the Pahiatua track to Awaruru length of the range would have these significantly affected by the quantity and scale presence of the turbines proposed. The views to the natural range are formally recognised in planning documents as of significance from the west and the east.

147. For those enjoying Hardings Park, of recognised scenic importance for its natural values, the structures experienced from within and around the Park would significantly reduce the natural characteristics enjoyed. Located at around the summit destination of Red Rock Knob would affect the overall memorability and naturalness of the Park experience. The structures would be contrary to the recognised scenic purpose of the Park.

148. Located on protected public land, the turbines viewed in proximity to the Tararua Forest Park would conflict with the recognised natural values and purpose of this Park.

149. I assess that the important shared and recognised values of the Tararua Range landscape would be significantly adversely affected by the proposed windfarm development.

TANGATA WHENUA EFFECTS

150. Tangata whenua identify the turbines as “*a blot on the landscape, and they oppress the spirit of the people and trample our ancestral Mother Earth.*” (He Kupenga Hao i te Reo Inc. submission). Tangata whenua say that the windfarm would interfere with the very essence of the cycle of the Mauri Ora. As identified by Dr Rod Clough, the important peaks of Marima and Tirohanga would be physically interfered with by earthworks involved in the proposal. In addition the peaks of our tupuna mountains. I understand the relationship of tangata whenua is not only with the physical promontories, but with the integrity of the range lands.

151. The effects of the construction works and the presence of the turbines would be significantly adverse for tangata whenua who value their relationship with the range lands and specific valued locations within the site.

CUMULATIVE EFFECTS

152. The Turitea site is part of the junction of the Ruahine – Tararua Ranges around the Manawatu Gorge (attachment 26, Figure 11.2) within which 6 windfarms have already been consented, involving 366 turbines of varying scales, forms and spacings. The proposal involves placing a further 122 larger turbines within the gap left on the gentle lands south of the Gorge, south of Te Rere Hau, and north of Motorimu (Pollock Figure 2-4; my attachments 1 and 2; attachment 6; attachments 14 and 25).

153. The 6 existing windfarms include a variety of turbine styles, which when viewed together result in additional visual and landscape effects. With obviously differing heights and structure of masts, with differing blade numbers and blade lengths, the scale and character of the turbines vary, they also vary in their relationship within groups, and between groups of differing types.

154. For Turitea, the proposed turbines are very large. Whilst having an individual elegance, groups of them overlapping result in effects being considerably multiplied. When they are visible with turbines of a different character, such as the close-together, two-bladed, smaller-sized Te Rere Hau turbines, there would be very considerable landscape and visual effects.

155. Whilst considerably smaller, due to the two-blade action, the Te Rere Hau turbines result in an apparent stilted movement. Closely spaced in a mass, viewed overlapping, and not being synchronized, the resulting agitated kinetic that results can be quite unsettling – and have been compared to a “swarm of houseflies”. The Te Rere Hau windfarm has a very different aesthetic than those proposed for Turitea.
156. The Te Apiti, Tararua 3 and Motorimu windfarms have greater similarity with those proposed for Turitea. They are very large with tubular mast and three blades. From the Manawatu Plains in and around Palmerston North, the similar character of the Te Apiti, Tararua, Turitea and Motorimu turbines, spread across a 35 km stretch of the Tararua – Ruahine Ranges junction, would read as one huge windfarm occupying the landscape. The enclaves of different turbines, such as the smaller Tararua 1 and Te Rere Hau turbine groups, would read as visual clutter and complexity within the extensive windfarm.
157. Various people have enjoyment from the visual elegance of seeing some turbines, such as some of the 55 at Te Apiti. To extend the through quantity, density, larger scale and spatial extent would result in a “bulk lot” aesthetic spread down the Ranges. From the plains most views of the ranges would involve several windfarms. As people view the breadth of the Ranges and as they move around, all the windfarms would be visually linked as part of a big mass. This would result in very different landscape and visual effects. For many people, whether viewed simultaneously or successively, due to their extensive coverage they would read as taking the ranges over.
158. The expansive farm proposed that would fill the 10 km gap in the 35 km length would result in a very different relationship with the ranges. Some district planning documents address windfarms as an industrial activity. With hundreds of very large structures visible variously “working” along the length of the ranges, the effect for many would be of an industrialization. With the different types and scales evident, apparent differences in movement, the resultant busy-ness will have a considerable effect. The activity would read as occupying the ranges.

159. From some views the turbine clumps would merge and the mass of componentry coalesce, with the movement exacerbating the complexity and effect of mechanization of the landscape.
160. From all the farms, some 300 turbines are potentially visible from the built city. As noted in the Summary report, many people consider “*there are already too many turbines on the Palmerston North skyline*”, they “*caused clutter*” and are “*distracting*”.
161. From my assessment of the 7 windfarms together, I consider the cumulative landscape and visual effects would be highly significant and adverse including in terms of visual effects from:
- Simultaneous visibility, when more than one wind farm is visible
 - Successive Visibility, when more than one wind farm is visible as the viewer turns his or her head
 - Intervisibility, when standing at one wind farm other wind farms are visible
 - Sequential visibility, when wind farms are revealed in sequence to a viewer moving through the landscape
162. The presence of the extensive almost contiguous windfarms would change the relationship with this range landscape. The addition of Turitea to Motorimu would very significantly multiply the landscape effects to the south (attachment, lower panorama 24-25). The addition of Turitea would very significantly multiply the landscape effects experienced by the built city (attachment, lower panorama 16-17, and Motorimu will be added). From the built city Te Apiti, Tararua and Te Rere Hau are clearly visible (attachment 14 and 16, lower). Turitea would multiply the effects many times by extending across the main immediate slopes and summit of the range directly associated with the city, and directly in the main city viewshed and street vistas (attachments 13 – 19).
163. The plethora of diverse, large and overlapping kinetic structures spread across the 7 windfarms would obscure and detract from the range landforms. The landscape values of the range would be very significantly affected by cumulative effects.

164. Wind farms would become the key characteristic of the landscape influencing people's willingness to use a route or to visit a locality. For many, the enjoyment of the whole and parts of the range landscape, the key local feature, would be significantly adversely affected.
165. The proposal would be perceived to "fill the gap" along the ranges between the Forest Parks to north and north. The result would be a sense of being encircled, enclosed or walled by wind farms giving rise to a sense of encroachment or even threat.
166. The landscape and visual effects of the proposal are assessed as highly significant.

SUBMISSIONS SUMMARY

167. The summary report (Hill Young Cooper Ltd, April 2009) grouped experiential concerns under "amenity" and others under "social and cultural" effects. Whilst many submissions noted landscape effects, the report has not addressed landscape effects as either the physical or the experiential landscape.
168. The report highlighted (page 20) recognition of the importance of the range as a landform feature, being distinctive, beautiful and prominent.

CONCLUSIONS

169. The Tararua Range in total is a major natural landform of the North Island and the Manawatu-Wanganui Region. The northern range forms a major natural feature and landscape in Palmerston North City. It is also a major natural feature and landscape for Tararua District.
170. I do not agree with Mr Wyatt or Mr Bray that large turbines constructed along the summit of the range south from Ramiha, between and across Marima and on towards Arawaru would be appropriate. Whether or not this

range summit is considered to be an ONL, the effects of the structures would be inappropriate.

171. Mr Pollock states (para. 247) that Mr Brown and Mr Wyatt conclude that the wind farm does not meet the criteria for an ONL. However, that is not the test.

172. The Turitea Reserve Management Plan supports my landscape assessment under the RMA, against the earthworks and structures that are contrary to the management of the catchment integrity, the water quality, the wildlife enhancement, the ecological corridors, and the landscape as city backdrop.

173. The natural scenic values of Hardings Park would be significantly affected by at least half of the proposed turbines through their location within and around the Park.

174. The city and plains associated with the Turitea length of the range would be very significantly adversely affected by the proposal. Regardless of whether an ONL or not, the landscape and visual effects of the proposed windfarm, individually and cumulatively, would be very significant at the broad city and region scale as well as at the very local scale.