

TURITEA WINDFARM

OPENING STATEMENT

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Introduction

1. I provide this opening statement to tie together the findings of my original brief of evidence of May 2009 with my supplementary brief of February 2010 in response to the redesigned Turitea Windfarm proposal. In the first instance I indicated 11 turbines out of 122 potential locations were acceptable. However, having heard all the evidence presented through the Hearing, including submissions from residents and other interest groups, and having carefully considered the redesign and undertaken further site visits, I identified 28 turbines out of a possible 105 locations fall within what I have described as an 'acceptable envelope area'. My revised position is shown on Map 1 in Appendix 1 of my supplementary brief. For ease of reference it is also shown on 'Map 2 Turitea Windfarm - 2009/2010 Turbine Zone Comparison dated 12 March 2010'.
2. Following a challenge by Mighty River Power (MRP) as to the scope of some of my evidence, in finding in favour of the inclusion of all of it, I was asked by Her Honour Judge Kenderdine to explain whether any of the policies, or my validation of the policies and objectives, have changed as a result of the redesign. I do so later in this statement.
3. To this end I note the relevant objectives and policies for the various Plans are set out in full in Appendix 1 of Mr Pollock's rebuttal evidence dated June 2009. These were accepted by me in the Joint Planning Caucus Statement of June 2009.
4. As a starting point I wish to clarify my role in this assessment process bearing in mind the dual purpose nature of PNCC, with its regulatory responsibilities under the Resource Management Act 1991 (the Act) on the one hand, and land ownership and windfarm business case for the Turitea Reserve on the other. I am employed as a Senior Planner within the Consents Team of PNCC thereby I have a regulatory function. In this context I have acted as a planning expert tasked with providing evaluative evidence as part of an independent team set up to review the proposal. The nature of the role has also dictated a huge amount of day to day project management where I had to heavily engage on the key issues surrounding the case. I was formally engaged as the lead planning expert in January 2009 following the earlier Call In of the applications in December 2008. Prior to the Call In from around mid-2008 I assisted in more of a 'back of house' role on project management matters and worked

closely with the consultant planner at that time, Helen Anderson, preparing for the public notification of the case.

5. For the avoidance of any doubt, I had no direct involvement in the Turitea Reserve Change process which PNCC was involved in during 2005-2007 and concluding with High Court Judge Baragwanath's judgment on 25 July 2007. This allowed for the purpose of the Turitea Reserve to be changed to provide for renewable electricity generation to take place. I was aware of the general proposals at the Turitea site, but not in any detail, and this was mainly for interest's sake as I was heavily committed as the PNCC planning expert on the assessment of the Motorimu Windfarm proposal to the south.
6. The Turitea Hearing has been described on many occasions as an iterative process and I consider that MRP must be credited for refining their proposal at various points along the way since the suite of consents were applied for in August 2008. My view is the proposal has been improved in each iteration. However, in my final analysis, and using the 'pieces of a jigsaw' analogy I have also heard mentioned in this process, it appears to me that at least one large piece of the jigsaw does not fit. This is because the changes to the original proposal do not in my view substantially address the critical issue of the significant adverse visual amenity and landscape effects which would arise if consent for the redesigned proposal is granted.
7. I do recognise that the benefits of this form of renewable energy production are substantial and of a scale never applied for before in this region on a 'single consent' basis. To put it in context the theoretical potential output of the redesigned proposal of up to 288MW (based on 96 x 3MW turbines being constructed) exceeds the combined theoretical output of up to 284MW produced by all of the existing 254 turbines in the Manawatu region. However, as a planner when I take a step back to look at the 'big picture', as I am required to do, and evaluate the substantial adverse local effects against the substantial national benefits (and some significant local benefits) in my view the underlying principle of sustainable management as set out in Section 5 of the Act cannot be achieved in this particular case.
8. In making this statement I am of course well aware of the Minister of the Environment's Call In Direction of 18 December 2008 where the Honourable Dr Smith sets out his reasons why the original Turitea proposal qualified as one of national significance. I repeat them here for ease of reference:
 - (a) *The proposal affects or is likely to affect or is relevant to New Zealand's international obligations to the global environment;*
 - (b) *The proposal affects or is likely to affect more than one region or district;*
 - (c) *The proposal will contribute to the achievement of the national target of 90% of electricity generation from renewable energy sources by 2025; and*

- (d) *The proposal will have national benefits deriving from the use and development of renewable energy in accordance with Section 7(j) of the Act.*

My Original Position – May 2009

9. To provide some context to my revised recommendation I will now touch upon key points drawn from my May 2009 brief of evidence which contemplated a scheme consisting up to 121 turbines. At the time I described the setting and scale of the Turitea proposal in the following way:
- (a) *The magnitude of the project is immense and of a completely different order of magnitude to other windfarm applications considered by PNCC;*
 - (b) *In spatial extent, the project consumes all of the Tararua Ranges landscape adjacent to Palmerston North and is located very close to patterns of urban developments in the Aokautere area, and Turitea and Kahuterawa Valleys;*
 - (c) *The Turitea Reserve is a major component of the site with high natural character and is located adjacent to Hardings Park which is a Scenic Reserve. The Reserve contains ecosystems of high ecological value.*
10. I identified a critical feature of this proposal that sets it apart from all others in the Manawatu - that the 12km wide site is effectively a 'window' to the city, with viewshafts of the site being possible from a high number of streets in Palmerston North due to the NNW-SSE grid plan layout of the city. This is clearly illustrated in the range of photos shown in the PNCC Photo Booklet which I produced in July 2009. I note none of these facts has changed since May 2009. The irony is the site is the only thing that remains the same since that time, but the paperwork associated with the case has grown dramatically!
11. My assessment on the original proposal began with preparation work on the public notification stage in late 2008. At the time it became apparent to me there was a large amount of people potentially affected by the proposal both from a local scale and from a wider citywide scale. To help simplify the assessment, and because there was a geographical logic, Mr Anstey and I spent some time identifying three large foothill 'communities of interest', those being the Pahiatua-Aokautere Road Area Group, the Turitea Valley-Ngahere Park Area Group and the Kahuterawa Valley Area Group. The Board may recall these are identified as the three areas shaded orange on my original 'Manawatu Context Map' (shown in Map 1 of the yellow PNCC Map Booklet). However, outside of these three areas another group can be identified as the balance of the population of Palmerston North city including residents of the wider Manawatu plains. A further, much smaller group, would constitute those residents on the eastern side of the Ranges. With such large groups of people involved it signaled to me that finding an acceptable project design would be absolutely critical to the success of the Turitea Windfarm proposal.

12. In my first brief I drew on my experiences from dealing with all planning and project management aspects on the Motorimu Windfarm proposal which was resolved on appeal by Judge Dwyer on 26 September 2008. In my view this was an appropriate and necessary source of 'best practice' particularly as the Motorimu site is located immediately south of the Turitea site and featured some similar issues with local residents. However, in saying that it is important to note that Motorimu was a much smaller windfarm in terms of theoretical power generation (64MW from 80 turbines) and lineal landscape occupation (approximately 3.5km). The reason for this approach is that the Environment Court found in favour of the landscape led design approach advanced by Mr Anstey and supported by myself. Briefly, the agreed principles were around seeking to cluster and contain turbines in relatively recessive locations and avoid turbines that over-dominated rural-residential properties and extended along spurs of high quality within a high amenity landscape.

13. With this large viewing audience and these design review principles in mind, I recommended that the original Turitea proposal should be refused consent, although Mr Anstey and I signaled 11 turbines at its northern end were acceptable. In advancing that position for the Board's consideration the following key factors were in play:
 - That there would be unacceptably high visual amenity effects on members of the public located in close proximity to the site and I rejected the notion advanced by Mr Wyatt that landscaping could be used as a tool in order to comprehensively mitigate the effects of the development;
 - I identified sequential and successive cumulative visual effects would be unacceptably high drawing on concerns I have with the saturation of the Tararua Ranges;
 - I identified concerns with the impact on the Scenic Reserve of Hardings Park with some turbines at the southern end of the site;
 - That 10 of the 11 turbines forming part of Group J (known as 'Game Ridge') were not supported by PNCC's ecological expert, Dr Paul Blaschke, due to the resultant vegetation removal in this area leading to fragmentation of the natural character of the Turitea Reserve coupled with concern over the proximity of steep slopes to receiving waterways; (Turbine #56 does not form part of this group)
 - In respect of the noise generated from turbines, I raised concern with the management of this issue and the notion of turbines having to be de-rated at times in order to comply with NZS6808-1998.

The Redesign – February 2010

14. In February 2010 the redesigned scheme was submitted with the removal of 21 turbine zones and the shifting of 44 zones by varying degrees. This reduced the scope of the application to a maximum of 104 turbines out of 105 zones (on the basis of a 2.3MW unit) or a maximum of 96 turbines (on the basis of a 3MW unit).

15. The changes are commendable and certainly make a significant difference in scaling back the dominating appearance to a degree from the Ngahere Park, Turitea Valley and Pahiatua-Aokautere Road area. I also note the removal of the turbines at the northern end of Group H (Browns Flat West) help to mitigate the effects on residents of the Kahuterawa Valley. I am well aware that the changes must come at a significant cost to MRP and reduce the renewable energy benefits that would have otherwise accrued in a scenario where the original 122 turbine proposal had been consented. Therefore consistency with Sections 7(i) and (j) of the Act is appreciably weakened.
16. In my supplementary statement I indicated a level of disappointment with MRP's efforts in terms of the redesign. I considered the evidence from the landscape experts (aside from Mr Wyatt and Mr Brown for MRP) was clear on the point that at the very least the turbines located on prominent positions on the foothills and lower ridges were unacceptable. In addition, and while there was not as much debate on this topic (until last week), the turbines on the higher ridges would also give rise to significant adverse cumulative effects when viewed from further out and there would be significant landscape impacts on Hardings Park. I felt these points were reinforced by the large amount of intelligent and well reasoned submissions from residents. These have been a particular feature of this case.

The 'Acceptable Envelope Approach' – February 2010

17. In my supplementary brief I introduced an 'acceptable envelope area'. This is shown as the 4km wide area located at the northern end of the site and contained in the blue dotted line on both Map 1 and Map 2. The area includes 28 turbines, although I do not specifically endorse the siting of those turbine zones as this would need to be the subject of further review. Nevertheless, for the purpose of comparison in terms of theoretical power output I indicated it could produce up to 84MW. To put this in context this would be enough to theoretically power nearly 38,000 homes based on the NZ Wind Energy Association website calculator. The 2006 Census reveals 29,300 dwellings in Palmerston North and 18,651 in Wanganui so this is enough power to theoretically satisfy nearly 80% of this total. This represents a very large windfarm both in terms of power generation and landscape occupation in this high profile 'window' to the city. I note it is only marginally smaller than the existing Te Apiti (91MW) and Tararua Stage 3 (93MW) windfarms.
18. The reason I ventured this opinion was two-fold. Firstly, I was fortunate enough to sit through almost all of the expert evidence and submissions from residents and interest groups, so I had a huge pool of information to draw upon. The 'acceptable envelope area' arises from my assessment of that information and has involved additional site visits to the receiving environment to critically evaluate the approach. Secondly, since the application was Called In back in December 2008 I saw my role as assisting the Board. So I considered it something of a duty to set out this alternative position

even though it goes a little further down the ridgeline than the recommendation of PNCC's landscape witness, Mr Anstey. The end point at Turbine 15 is what I consider is the 'high tide' mark of what might be acceptable on such a high profile site.

19. The reasons why I consider the 'acceptable envelope area' may be a suitable approach to take can be summarised as follows:
- I consider that the internal natural qualities of the Turitea Reserve do not become dominant until beyond Turbine 15. The flanks of South Range Road to this point are predominantly under pasture or production forestry cover much of which has, or will be cleared. I accept the view of Mr Anstey is overwhelmingly valid beyond Turbine 15 where natural character predominates and the ridgeline and peaks become increasingly dominant and visible features when viewed from Manawatu locations;
 - For most locations in Palmerston North where the Tararua Ranges are visible as a significant backdrop, there is a discernable difference in visibility of the Turitea Reserve in terms of its vertical dimensions from about Turbine 15. This also coincides with the predominance of natural vegetation;
 - The benefits of using the outstanding wind resource;
 - The efficient use of existing infrastructure including the access track to Turbine 15;
 - The revenue available for use of turbines located within the Reserve to enhance the Turitea Reserve's ecology; and
 - The fact that I consider that Mr Bray is correct that a cluster of large turbines in this location continues a coherent pattern beyond Te Rere Hau Windfarm and thereby adds some visual cohesion to landscape treatment.
20. I must stress that the 'acceptable envelope area' is not an ideal scenario. It represents a compromise at best, as in my view it would still give rise to significant adverse visual effects both in terms of the viewing audience on the Manawatu side of the Ranges and those on the eastern side. But the renewable energy benefits that would result are persuasive.

Relevant Objectives and Policies

21. Turning to the relevant objectives and policies of the Plans I now marry these up with my view of the redesign and also in relation to my 'acceptable envelope area' approach. In the interests of brevity I only consider the Palmerston North City District Plan (PNCDP) and the Horizons Regional Policy Statement (RPS) which I consider are the key local and regional plan documents in this regard. As noted in my original brief of evidence, I did not undertake an assessment of the Tararua District Plan. In terms of the Horizons Proposed One Plan, while I understand some Hearings on topics have occurred since May 2009, as there are no decisions on key matters relating to this proposal, my original comment about affording little weight to this Plan still stands.

Palmerston North District Plan (Operative 24 March 2005)

22. These fall into two categories. Briefly, Citywide objectives provide the overarching platform to promote a safe, healthy environment, providing for a range of business and economic activities, whilst recognising the distinctive rural and urban character of the City and managing the adverse effects of activities on the environment. Rural Zone objectives and policies encourage the effective and efficient use and development of the natural and physical resources of the rural area whilst controlling potential adverse effects on odour, noise, traffic and visual impact.
23. In this context I find that the Turitea redesign generally continues to meet the intent of the overarching Citywide policies and objectives and those within the Rural Zone insofar as the windfarm is clearly a large development proposal that is appropriately sited in the Rural Zone (and indeed provided for as a Discretionary Activity in the PNCDP). It will also provide significant benefits to the Manawatu region. However, when balancing this up against the significant adverse visual and landscape effects of the 104 turbines, in my view it is clear based on the evidence that it would not meet the intent of Policies 2.2 and 2.3. These seek *'To ensure that the adverse effects of activities in the rural area are avoided, remedied or mitigated such that the amenities of the area and nearby urban areas are maintained'* and *'To control the actual or potential environmentally adverse effects of activities in the rural area, including the adverse effects of: ... noise, ... and visual impact'*.
24. In respect of the 'acceptable envelope area' approach, I am satisfied, on balance, that a truncated proposal of this size would be a better fit in terms of these objectives and policies. It still provides for a very large proposal to go ahead but avoids what I consider are the most significant effects.

The Manawatu-Wanganui Regional Policy Statement (Operative, 18 August 1998)

25. There are 20 objectives of relevance each with a host of policies falling under them. These are 1, 2 and 3 (Iwi), 5 (Land), 7 (Plant and pest control), 8 (Natural Features & Landscapes), 9 (Significant indigenous vegetation), 11 (Water Quality), 11A (water quality in lakes, rivers and streams), 13 (Groundwater), 15 (Natural character of lakes, rivers and wetlands), 16 (Structures or activities in the beds of lakes and rivers), 19 (Air Quality), 19A (Greenhouse gases), 27 (Hazardous Substances), 28 (Sustainable management of energy resources), 29 (Adverse effects of energy generation in the Region), 30 (Land Transport), 34 (Duration of resource consents) and 35 (Iwi Consultation). In my view of particular relevance are consideration of outstanding natural features and landscapes, significant indigenous vegetation and having regard to the sustainable management of energy resources balanced against the adverse effects of such energy generation.

26. So turning to the redesign, to my mind there remains a significant issue with the consistency of the proposal in terms of the RPS. I stand by my original opinion that there are at least parts of this site that must qualify as a outstanding natural feature or landscape of regional significance, if not within the scope of Section 6(b), via the definition of 'skyline' on page 112 in the RPS. I also note that Mr Shaw identifies the Turitea Reserve as containing significant areas of vegetation for the purposes of Section 6(c) in transcript pages 632/633. However, I do acknowledge that the redesigned proposal, as with the original, must accord with Objective 28, particularly Policy 28.2 '*To promote the increased use and development of renewable energy sources*'. Although I say this in the context of Objective 29 which sets out '*To avoid, remedy or mitigate the adverse effects of energy generation in the Region where practicable*'. Clearly there are significant adverse effects associated with this proposal.
27. When I evaluate my 'acceptable envelope area' against these same objectives and policies, I consider there is primary support with the RPS through Objective 28 (promoting renewable energy). There is a difficulty with Objective 8 concerning this outstanding natural feature or landscape of regional significance. This is that the 4km lineal width traverses land which may fall under this definition although I view this area at the lower end of the 'outstanding' spectrum. Taking this a step further, this is a substantial width of development within which these landscape and visual effects cannot be readily mitigated.
28. Therefore my findings are that the redesign, as with the original, falls substantially short of meeting the objectives and policies of both the PNCDP and RPS. I acknowledge that there is support for the proposal in both documents; however the changes forming part of the redesign are not nearly so significant as to change my opinion that the Turitea proposal could now be considered as consistent with both documents.

Conclusion

29. In conclusion I view the redesign process as a missed opportunity for MRP to resolve what appeared to be overwhelming evidence that a host of significant changes were necessary to bring the proposal more in line with best practice windfarm design. I would have been happy to assist in the redesign process, and would certainly have made Mr Anstey available had his assistance been sought by MRP. Nevertheless, for my own part I have tried to assist the Board by defining an 'acceptable envelope area' however it is important to note that this has its own limitations.
30. So I now must revisit the key question under Part 2, Section 5 of the Act. That is whether the redesign meets the sustainable management purpose of the Act? In both my original and supplementary evidence I arrived at the same conclusion that it does not. Overall, I remain unconvinced that a proposal of this scale, this close to Palmerston North city and nearby established patterns of rural-residential land use, enables people and communities to provide for their social, cultural and economic wellbeing and health and

safety. In my view it appears the only way to satisfactorily avoid, remedy, or mitigate the adverse effects on the environment would be to refuse consent altogether or substantially scale back the proposal more in line with the 'acceptable envelope area' approach I have documented.

Jeff Baker
PNCC Senior Planner
29 March 2010