BEFORE THE ENVIRONMENT COURT
CHRISTCHURCH REGISTRY

ENV-2016-CHC-47

IN THE MATTER of an appeal under Section 120
Resource Management Act 1991

BETWEEN

BLUESKIN ENERGY LIMITED
Appellant

AND

DUNEDIN CITY COUNCIL
Respondent

BRIEF OF EVIDENCE OF JANET RHONA STEPHENSON

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LAWYERS
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INTRODUCTION

Qualifications and Experience

1. My name is Janet Rhona Stephenson. I am a social researcher and the Director of the Centre for Sustainability at the University of Otago. My qualifications and experience are set out as follows.

Academic credentials

2. I have a BA in Sociology (Auckland), a Masters in Planning (Massey) and a PhD in human geography (Otago). I gained my PhD in 2005 on the topic of cultural values in landscapes.

Professional credentials

3. I worked as a professional planner from 1987 to 2001, and lectured in the Masters of Planning course at the University of Otago 2002-2009. Since 2009 I have worked at the Centre for Sustainability, a University of Otago research centre with a focus on interdisciplinary research on sustainability issues in agriculture, food, energy and environment. My main research specialty in recent years has been social research relating to energy behaviour change and energy transitions.

Pertinent research

4. I have personally undertaken research, and supervised postgraduate research, that has examined aspects of community responses to wind farms and other forms of distributed electricity generation. I have provided the references of 12 publications from this research in Appendix A, dating between 2008 and 2016.

5. Research that is particularly pertinent to this evidence includes:

(a) Two student projects that involved interviews of residents in Waitati ¹ and the wider Blueskin area² on their views towards small scale wind projects.

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¹ Hoffman (2008) Is small beautiful?: attitudes towards community-owned wind energy in Waitati. Student research project supervised by Janet Stephenson, Geography Department, University of Otago
(b) A 2010 research contract that I undertook for the Energy Efficiency and Conservation Authority (EECA) to examine whether societal acceptance issues were significantly limiting the establishment of new renewable energy generation projects such as wind farms, and to identify the key characteristics of social acceptance/resistance in the New Zealand context\(^3\).

(c) Involvement in advising on in-depth engagement undertaken by BRCT on the proposed wind project project in 2011-12, also funded by EECA. This also involved writing a report that summarised community engagement on energy initiatives in Blueskin to that date.\(^4\)

(d) Research on the views of people who do not make submissions on wind farms in New Zealand.\(^5\)

(e) A review of the international emergence of new forms of community organisation around local energy production.\(^6\)

**Involvement with the project**

6. As well as academic research, I have had some involvement with facilitating the aspirations of the Blueskin community (and previously the Waitati community) through my strong interest as an academic in seeking to understand energy transitions, and the role of communities in fostering change. This involvement was detailed in my evidence at the Council hearing. In brief, it includes:

\(^2\) Gorrie, Seth (2011) Blueskin People Power - community perspectives on the BRCT energy project. Report from summer research scholarship supervised by Janet Stephenson. Centre for Sustainability, University of Otago


(a) Running a 2007 class project for Masters of Planning students on planning for a resilient Waitati by 2017, which was reported back to the community

(b) In 2008, leading the establishment of a research relationship between the then Waitati Energy Project members and Otago University’s Energy Research Centre (OERC)

   (i) In June 2009, helping set up and run an all-day ‘visioning’ workshop for the Waitati community on its energy ambitions, which concentrated on the concept of a community wind farm, as then still in early concept phase.

(c) Attending at least two meetings of the Waitati Energy Project (precursor to the Blueskin Energy Project) to share research findings.

(d) In June 2013, writing a blog for the Blueskin Resilient Communities Trust’s website. This was largely a comment on how the diverse group of communities, households and individuals that make up Blueskin have come together to develop a shared vision about how to transition to greater local resilience.

(e) Co-presenting with the BRCT manager, Scott Willis, at a number of conferences and symposia, on aspects of the research and the progress of BRCT towards its vision for a wind turbine/cluster.

(f) Writing a submission in support of the Blueskin wind farm, based on the involvement I have had over the years in the community engagement relating to the wind project, and wider community aspirations about a sustainable and resilient future for the Blueskin area.

(g) Preparing and presenting a brief of evidence to the DCC hearing for the wind farm, which focused on outlining the community consultation and engagement undertaken by BRCT
and its antecedent organisations regarding the idea of a community wind project.

7. I do not live in the Blueskin area and I do not stand to benefit from (or be negatively impacted by) by the Court’s decision. My interest and involvement, as outlined above, has been primarily driven by my interests as a researcher in community-driven energy transitions. The evidence I present is based on prior published social research and documentation associated with the wind proposal, including a review of submissions.

8. I have reviewed the operative Dunedin City Council District Plan, the notified plan (2GP), and the National Policy Statement on Renewable Electricity Generation 2011, and the briefs of evidence of Jacinta Ruru, Scott Willis, Michael Moore and Grenville Gaskell.

9. I have read the current Code of Conduct for Expert Witnesses as contained in the Environment Court’s Consolidated Practice Note (2014), and I agree to comply with this Code. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise. I have not omitted any material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

10. In my evidence, I assess the social impact of the proposed project including both positive and adverse effects. My evidence covers the following:

(a) an overview of the approach I will take to assess social impacts, including consideration of how community perspectives can change over time.

(b) community wind projects internationally.

(c) a brief description of the demography of the Blueskin community.

(d) the origins of the Blueskin turbine proposal.
(e) the community engagement undertaken since the inception of the idea of a wind turbine.

(f) an assessment of the actual and potential effects on the social aspects of the environment as a result of the project proceeding, including:

(i) Health and wellbeing

(ii) Economic and employment

(iii) Community and governance

(iv) Future legacy

(g) Predictions (based on comparable projects)

(i) If consent is granted

(ii) If consent is declined

(h) Conclusion.

THE APPROACH TAKEN TO SOCIAL IMPACT ASSESSMENT (“SIA”)

11. In developing this evidence, I have been guided by two key documents: the guidance document put out by the International Association of Impact Assessment entitled ‘Social Impact Assessment – guidance for assessing and managing the social impacts of projects’⁷ and the European Commission report ‘The Social Acceptance of Wind Energy’⁸ which reviews 20 years of research into societal responses to wind energy developments. I have also reviewed the Social Impact Assessment for the Correnso Underground Mine in Waihi⁹ as an example of good practice SIA in New Zealand. This was a condition of the Correnso consent issued by the Environment Court on 18 October 2013.


12. I have also been guided by the Fourth Schedule to the Resource Management Act, and in particular clause 7(1)(a) which states that an assessment of environmental effects should include “any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects”. I also take into account the definition of ‘effect’ in the RMA, which includes “any past, present, or future effect” (section 3(c) RMA).

**The dynamics of community acceptance**

13. In relation to the temporal nature of effects, there is a body of research on the dynamics of community acceptance of wind farms. A number of researchers internationally have discovered that community acceptance typically experiences a U-shaped curve, whereby acceptance is high in the early stages, lowest during the proposal stage (due to fears and perceived negative impacts), and then recover following implementation (due to familiarity and fears being unfounded). 10 Figure 1 below, from a study of 16 different cases of solitary turbines and wind farms, shows this empirically. 11 Of relevance to Blueskin, this study found that community acceptance for single turbines rebounded to a higher level than the original position, compared to wind farms with multiple turbines, which rebounded but to a lower level than the original level of acceptance.

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Figure 1: Development of public attitudes towards wind power dependent on nearby project. Y axis indicates group averages in standard units (z-scores) (Wolsink 2007).  

14. There is at least one reported case where this rebound has not been seen but most research on this topic does show this U-shaped pattern, including a recent study of several wind farms in the UK which showed that different areas of concern had different rates of ‘rebound’.

What constitutes social impact?

15. The Banarra social impact assessment for the Correnso Underground Mine at Waihi groups social impacts under the following categories: Economy, employment, property, community, health and wellbeing, future legacy, communication and governance. I use the same categories albeit in a different order.

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16. The IAIA guidance publication\textsuperscript{16} defines social impacts as being changes to one or more of the following:

(a) People’s way of life – how they live, work, play and interact with one another on a day-to-day basis;

(b) Their culture – their shared beliefs, customs, values and languages;

(c) Their community – its cohesion, stability, character, services and facilities;

(d) Their political systems – the extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose;

(e) Their environment – the quality of the air and water that people use, the availability and quality of the food they eat, the level of hazard or risk, dust and noise they are exposed to; the adequacy of sanitation; their physical safety; and their access to and control over resources;

(f) Their health and wellbeing – health is a state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity; and

(g) Their fears and aspirations – their perceptions about their safety; their fears about the future of their community, and their aspirations for their future and the future of their children.

17. I will use these points to guide the scope of my discussion and in drawing conclusions about the social impacts of the Blueskin turbine.

18. Social impact can also occur at many scales, from the impact on individuals and households to regions and the nation as a whole.

These scales of impact will be discussed in my evidence where relevant.

COMMUNITY WIND PROJECTS INTERNATIONALLY

19. Internationally there has been a burgeoning of community-related wind projects. A study in Europe in 2014, for example, identified around 2300 renewable energy cooperatives across 17 countries, with most in Germany, Denmark and Austria (Figure 2).

20. These are taking different forms, from countries where there is a legal requirement that a proportion of shares in commercial wind projects are held by a community organisation or offered to residents in the vicinity (e.g. Germany); to commercial developments where developers offer funding to local projects or community organisations (common in many European nations); to wind projects that have been initiated by communities themselves.

21. Research, internationally and in New Zealand, establishes that wind developments with fewer turbines are generally more socially

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acceptable than large developments.\textsuperscript{19} Research has also shown that wind developments that provide a flow of benefits back to the community are favoured more than those where this does not occur.\textsuperscript{20}

22. Hepburn Wind in Australia is a closer example of a small wind development that was intentionally established to generate a flow of benefits back to the community. Hepburn Wind\textsuperscript{21} emerged from a community at Daylesford which had opposed a commercial wind development in 2005, but decided to establish their own (two-turbine) wind park in collaboration with a wind farm developer. The vision was to establish a model for other communities, and the venture has a strong focus on community engagement, regional economic benefits, local jobs, community empowerment and capacity building.

23. The project involved a number of years of community engagement, investigation and planning. The wind farm is a cooperative venture with around 2000 members, the majority of whom are local to the project, who collectively have contributed $9.8 million to the wind farm construction. The Victorian state government has provided grants totalling $1.7m and the Bendigo Bank a $3.1m loan. The two turbines totalling 4.1 MW were erected in 2011.

24. As well as direct dividends to shareholders, the Hepburn Wind Community Fund makes grants to the community through a competitive annual/biannual grants program, and to renewable energy and/or community energy focused projects through their Energy Fund. Since 2011 Hepburn wind have funded 45 local projects with grants totalling over $89,000. Other social benefits described in their website include:

(a) Setting a new standard in community engagement for infrastructure developments.

\textsuperscript{21} https://www.hepburnwind.com.au/
(b) Creation of intellectual property, which is being made freely available to others.

(c) Creation of new employment and skill development opportunities for local staff and more than a dozen local service providers.

(d) 'Up-skilled' dozens of volunteers in areas as diverse as community engagement, project management, finance, communications and contract negotiation as the project interacts with a large number of community, commercial and government stakeholders in a complex industry.

(e) Empowered many in the community with a sense of pride and purpose, fostering a range of new and complementary local sustainability groups.

(f) Designed an innovative benefit sharing model that will ensure that the whole community stands to benefit.

THE BLUESKIN COMMUNITY

25. The Blueskin community is defined by its relationship to Blueskin Bay, being the settlements in the vicinity of the Bay (Warrington, Evansdale, Waitati and Doctors Point), north up the coast (Seacliff), and east around the Purakaunui inlet (Osborne, Purakaunui, Long Beach). This area is also within the rohe of Kati Huirapa Runaka ki Puketeraki, whose marae is north of Blueskin Bay, near Karitane. There is thus no fixed boundary to the community, as it includes a number of small settlements and their rural hinterland, as well as the interests of Kati Huirapa. Mr Willis includes a map identifying the Blueskin Bay area, and records that the area of action for BRCT extends beyond the Bay area itself.
FIGURE 3: Blueskin Bay and the main settlements of the Blueskin area

26. The Blueskin area falls with three Census area units – Evansdale, Warrington and Waitati. Table 1 below shows figures from the 2013 NZ Census to provide some characteristics of the nature of the population. The figures are for the Waitati, and Warrington Area Units, and those meshblocks in the Evansdale Area Unit that include Blueskin Bay settlements and their rural hinterlands (see Appendix B). These are compared with the figures for Dunedin City (which includes both the urban and rural areas of the City).

Table 1: Demographic data from the NZ Census 2013

<table>
<thead>
<tr>
<th></th>
<th>Blueskin part of Evansdale</th>
<th>Waitati</th>
<th>Warrington</th>
<th>Dunedin City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>702</td>
<td>513</td>
<td>450</td>
<td>120,249</td>
</tr>
<tr>
<td>Occupied houses</td>
<td>321</td>
<td>216</td>
<td>198</td>
<td>46,221</td>
</tr>
<tr>
<td>Unemployment (over 15 years old)</td>
<td>6.5%</td>
<td>7.1%</td>
<td>3.9%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Median income</td>
<td>$24,104</td>
<td>$30,700</td>
<td>$29,300</td>
<td>$23,300</td>
</tr>
</tbody>
</table>
27. Table 1 shows that all of the three census areas of Blueskin have lower unemployment rates and higher income, on average, to Dunedin city as a whole. Averages mask range, and as with many other regions there are some households on very low incomes, and others on high incomes. While the community as a whole is not highly vulnerable from an employment and income perspective, there will be households that are more vulnerable than others.

28. Another way of defining the community of interest is on the basis of connections within the area serviced by the Waitati substation, as this is the lines network into which the power from the turbine will feed. The local lines network runs from Seacliff to Long Beach, taking in the settlements in between. Powernet has reported that there are 954 connections, some of which may be to unoccupied houses, holiday houses, businesses or workshops.

THE ORIGINS OF THE BLUESKIN WIND PROPOSAL

29. A distinctive aspect of the Blueskin wind proposal is that the concept was conceived by the community. The idea of local energy generation had been discussed as part of the aspirations of the then Waitati Energy Project, along with a desire to improve the insulation standards of homes and assist with households’ energy efficiency. The newly-formed Blueskin Resilient Communities Trust (BRCT), now drawing support from people in a number of settlements in the vicinity of Blueskin Bay (Figure 3), and fresh from the success of retrofitting approximately 400 homes with insulation, sought to engage with the wider community about options for the future focus of the Trust and how to make the community more resilient and self-sustaining.

30. An all-day ‘Integrated Thinking’ workshop was organised by BRCT and the Otago Energy Research Centre on 30 June 2009 with a theme of Community-owned renewable electricity generation and developing community capacity to deliver sustainable initiatives. Before this date, there had been discussions within the Waitati Energy Project group about the potential for local energy generation from tidal generation in the mouth of Blueskin Bay, small hydro in a nearby stream, solar generation, and wind, with University of Otago students carrying out
some initial wind testing on sites with positive results. The workshop was intended to develop a collective vision for the future of Blueskin and whether engaging in renewable electricity generation was supported.

31. The participant list (Table 2) purposefully included people who represented diverse interests and organisations.

Table 2: participants at the Integrated thinking workshop, 2009
(WEG = Waitati Edible Gardens (Gardeners); WEP = Waitati Energy Project; WCCB = Waikouaiti Coast Community Board; W3 = A semi organised hitching network for Waitati, Warrington and Waikouaiti.)

<table>
<thead>
<tr>
<th>Name</th>
<th>BRCT; WEG; Otago Organics; WAITATI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Dickson</td>
<td>BRCT; WEG; WCCB; Beach Care Society; various networks; WARRINGTON</td>
</tr>
<tr>
<td>Geraldine Tait</td>
<td>BRCT; WEP; WEG; WCCB; Beach Care Society; various networks; WARRINGTON</td>
</tr>
<tr>
<td>Antony Deaker</td>
<td>BRCT; WEP friend; Kati Huirapa; Artist networks; WAITATI</td>
</tr>
<tr>
<td>Chris Young</td>
<td>BRCT; Otago Polytechnic; various networks; WARRINGTON</td>
</tr>
<tr>
<td>Scott Willis</td>
<td>BRCT; WEP; WEG; W3 Rideshare supporter; various networks; WAITATI</td>
</tr>
<tr>
<td>Andy Barratt</td>
<td>WCCB; River Care group; East Otago Walking-Cycling Network; Otago Organics; Tree-Crop Association; KARITANE</td>
</tr>
<tr>
<td>Sue Hensley</td>
<td>Orokonui Ecosanctuary; WEP volunteer; W3 Rideshare volunteer; WAITATI</td>
</tr>
<tr>
<td>Danielle Cameron</td>
<td>Get-The-Train; Purakaunui Activist; PURAKAUNUI</td>
</tr>
<tr>
<td>Ross Johnston</td>
<td>Get-The-Train; Purakaunui Activist; WEP friend; PURAKAUNUI</td>
</tr>
<tr>
<td>Jackie Fanning</td>
<td>W3 Rideshare organiser; WAITATI</td>
</tr>
<tr>
<td>Lynnaire Johnston</td>
<td>WEG volunteer; Blueskin Garden Club; WEP volunteer; WAITATI</td>
</tr>
<tr>
<td>Jason Ross</td>
<td>WEG; tree crop association; Otago Organics; Volco; WAITATI</td>
</tr>
<tr>
<td>Karan Snow</td>
<td>BRCT admin; WEG volunteer; WAITATI</td>
</tr>
<tr>
<td>Lynley O'Neill</td>
<td>WEG; A&amp;P Society; Waitete Bush owners; WAITATI</td>
</tr>
<tr>
<td>Dugald McTavish</td>
<td>Hampden Energy group; HAMPDEN</td>
</tr>
<tr>
<td>Nick Holmes</td>
<td>Documentary maker; DUNEDIN</td>
</tr>
<tr>
<td>Janet Stephenson</td>
<td>Otago Energy Research Centre; DUNEDIN</td>
</tr>
<tr>
<td>Rob Lawson</td>
<td>Otago Energy Research Centre; DUNEDIN</td>
</tr>
</tbody>
</table>

32. By the end of the workshop, there was collective support for the idea of 1-2 ‘community-owned wind turbines’, as a potential project that
could address a number of aspirations: eco-friendly energy, financial returns, a vehicle for community action, and supplying local energy. The notes, drawn up on large sheets of paper during the meeting, also identify questions that would need to be addressed including whether it would preclude other energy options; placement so as not to compromise future plans; the potential for birdstrike if it were near the Orokonui ecosanctuary; and the opportunity cost for other community options. The notes also covered points to be addressed for the design of any ownership structure, which included the need for ‘full’ consultation, the locus of control, shareholder criteria, and distribution of profits.

33. A key point that will become relevant later is that there was an assumption at that point that a turbine could supply ‘local energy’ directly to households and thereby potentially reduce the cost of their electricity. This was later found to not be possible because of the nature of New Zealand’s energy market.

34. The workshop gave the BRCT the confidence to go on to explore the technical and financial feasibility of local wind generation, along with engaging more widely with the community on the concept.

COMMUNITY CONSULTATION AND ENGAGEMENT

35. In my evidence to the DCC hearing I provided in-depth detail on the community engagement undertaken by the Trust relating to the proposed wind turbine development. The 122-page ‘Blueskin People Power Toolkit’ report evidences the multitude of ways in which community engagement had occurred up to the end of 2012. By mid 2011, this had included energy education workshops, public speakers, the community visioning workshop, a number of public meetings/forums, a field trip of around a dozen community members to see another wind cluster at Horseshoe Bend, research feedback

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events, and a hui at Puketeraki marae to explore the concept with Kati Huirapa. Scott Willis’s evidence provides an outline of the community engagement that took place.

36. By this point the wind concept had proceeded to a stage where a number of potential sites had been tested and a preferred (but not yet confirmed) site had been identified, possibilities for the number and type of turbines were under consideration, and options for structure, governance and funding of the project had been identified but not decided. Issues raised at a public forum in February 2011 on the future structure of the wind enterprise included: whether there was sufficient wind resource for it to be viable, the need to continue to focus on energy efficiency concurrent with developing local generation, whether it would be necessary to partner with a major organisation to make it viable and what this might mean for local control, the importance of self-reliance in a period of increasing power prices, and the need to engage more widely across the community.

37. These points helped inform the structured engagement process (the phase funded by EECA). This process was designed to get community feedback on how (and whether) to proceed.

38. The structured engagement process centred on three community Open Days during weekends in September 2011 at Long Beach Hall, Warrington Hall and Waitati Hall, covering the three main concentrations of population in the Blueskin Bay area. Local publicity about the open days included household leaflet drops, newspaper advertisements, the Blueskin Energy Project website and e-newsletters, and public noticeboards.

39. Two planners, Ros Day and Andrew Henderson provided assistance on the engagement design and delivery. This was the first time professional planners had been involved. The engagement team designed the Open Days as an opportunity to gauge the level of community support. A wide variety of visual aids were created to showcase the proposal, as well as different means of collecting community members’ perspectives on the project.
There were 95 recorded ‘parties’ attending (from single attendees to family groups) across the three events. The most commonly represented residential location of parties was Waitati (35%), followed by Warrington (25%), and Purakanui (14%). The Open Days also attracted people from the wider Dunedin area.

The Open Days were primarily aimed at sharing information and giving an opportunity for questions to be asked, but empirical data was also gathered in three ways: in written feedback, a ‘straw poll’ of a preferred business structure, and an online survey following the Open Days.

Written feedback provided on the days was largely very positive, with comments such as ‘visionary’, ‘fantastic concept’, ‘very impressed and inspired’. Some questions or concerns were identified, including whether it would be cost-effective; the lifespan of turbines; the geographical area which would be supplied power from the turbines; what the financial benefits would be to the community; the colour, height, noise and number of turbines; and about personal costs (e.g. will there be a joining fee?) and benefits (e.g. will my power be cheaper?) of being involved. Some questions were also raised about the quality of the wind resource and wind data gathering to date; impacts on birds, roads and health; and visual impact.

72 votes were received in the straw poll at the Open Days, the results of which showed a preference for either a community co-operative arrangement or a joint venture, over and above a company structure.

Of the 49 respondents to the online survey following the Open Days, 10 had attended an open day, while 25 reported they had not attended an open day. The remaining respondents did not respond to this question.

Only 2 respondents (5%) to the online survey felt that there should be no turbines in the Blueskin area. Of the sites investigated, the Porteous Hill site was the most preferred site.

When asked if they would be interested in investing in the local wind cluster if it was shown to be a viable project, 72% said ‘yes’ and 5%
‘no’, with the rest commenting that it would depend on their financial circumstances. 11% thought they could invest $10,000, 30% could contribute $6,000 and 14% would contribute $1,000, with the remainder being unsure.

47. Together these responses highlighted where further information and discussion was needed as the project was developed further.

48. Three further community meetings were held in Long Beach, Waitati and Warrington in November 2012 to provide an update on developments and to seek feedback on the proposal to establish a development company, Blueskin Energy Ltd. Thirty-eight people filled in the optional Exit Survey at the meetings. The results are reported in some detail in Appendix 10 of Scott Willis’s evidence. In answer to the question ‘How do you feel about the proposed Blueskin wind cluster project, 63% chose ‘Love the idea’; 25% chose ‘Yeah, OK’ and 12% chose ‘Um, probably not. None chose ‘Really dislike it’.

49. Scott Willis’s evidence describes the further community engagement in 2013-2016, and the ongoing communication through various media since 2007, including in the Blueskin News and Rothesay News, mailbox flyers and the use of social media.

50. Overall, it is clear that the idea of a community wind turbine emerged collectively from community members as a project that (if it proved to be viable) was intended to enhance community resilience, bring in an income stream for investing in community projects, and show by example how communities can take action on climate change. Alongside several years of assessing the technical and financial potential of a wind turbine (or cluster of turbines) the BRCT carried out extensive community consultation and engagement. BRCT have sought to address and mitigate any concerns raised through their design of the proposal, reducing the proposal from three to one turbine, and additional proffered conditions of consent.
SOCIAL IMPACTS

51. The proposal as it was first lodged with Dunedin City Council was for three turbines. The proposal before the Court is for a single 3 MW turbine. My evidence relates to this amended proposal.

52. This section assesses the positive and negative social impacts of the proposal at the scales of households, community, region, and (where relevant) NZ as a whole. My assessment does not cover impacts that could directly affect the community that are otherwise being assessed by other experts in noise, ecology, and landscape.

HEALTH AND WELLBEING IMPACTS

53. A number of opposing submissions raise concerns about the proposal, particularly noise and infrasound, on the health of people in the vicinity of the turbine.

54. The European Commission report, which reviews 20 years of research into societal responses to wind energy developments23 has the following conclusion on health effects (p36-37):

“Knopper et al. (2015) note that there were around 60 peer reviewed articles on the health impacts of turbines up to 2014, and there are at least 20 papers published since this date. Although the rigour, sample size and methodologies deployed vary, there is now a significant body of evidence related to each of the main direct environmental impacts of wind energy projects including EMF (Israél et al., 2011, McCallum et al., 2014), shadow flicker (e.g. Massachusetts Department of Environmental Protection and Massachusetts Department of Public Health 2012, UK Department of Energy and Climate Change 2011), low frequency noise (e.g. Moller and Pedersen 2011, Bolin et al. 2011) and infrasound (e.g. Turnbull et al, 2011, Bolin et al. 2011).

“The general conclusions from most of these studies, as reported by Knopper et al. (2015) is that they are all unlikely to result in

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impacts to human health. However it has also been noted that the attribution of symptoms arising from exposure to wind turbines may arise from a ‘nocebo’ effect where an expectation or worry of health effects prompted by media discussion of the phenomena, or from opposition campaign groups that have raised health as a potential impact of a proposed project (Chapman et al. 2013, Chrichton and Petrie 2015).”

55. The report also notes:

“Although turbines are not loud enough to cause hearing impairment not causally linked to adverse effects, it is clear that turbine noise can result in annoyance to those who live near wind energy projects, in the same way as noise from road, rail and traffic. […] Shepherd et al (2011) suggested that in some cases annoyance may not be linked with noise itself but to other causes of conflict between the community and the developers of wind energy projects. Other researchers have found that the degree of annoyance decreases with the level of economic benefit people receive from the project (Pedersen et al. 2009, Janssen et al. 2011) thus linking community benefits with social acceptance.”

56. On the basis of these research findings I conclude that, as long as the turbine noise remains within the relevant noise standards, the health effects will be minor.

57. Over the past few years the BRCT has actively assisted vulnerable households by installing subsidised insulation and improving community knowledge about energy efficiency. BRCT intends to continue this form of benefit via the wind turbine dividend. Such improvements have proven health benefits.24

ECONOMIC AND EMPLOYMENT IMPACTS

58. The project will create short-term employment in the construction of the wind turbine, and long-term employment in the ongoing

management and maintenance. To try to establish what these effects might be, I drew from a 2012 study by BERL Economics of employment generated by wind farms\textsuperscript{25}. Based on their average figures for a number of existing wind farms (totalling 110MW) (see Table 3), the 3MW Blueskin wind turbine would involve 2.43 full-time equivalents (FTE) in planning, 5.37 FTE in construction and installation, and 0.45 FTE in ongoing operation and maintenance.

Table 3: FTEs per MW, BERL-NZWEA survey, 2012 (p18)

<table>
<thead>
<tr>
<th>Planning</th>
<th>Construction and Installation</th>
<th>Operation and Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey (110 MW)</td>
<td>0.81</td>
<td>1.79</td>
</tr>
</tbody>
</table>

Source: BERL-NZWEA Survey, 2012

59. I also communicated with Nick Bowmar, Director at iQ Energy, who has experience in developing small scale projects, and he considers these figures are slightly low for a small-scale project as some activities are independent of project size. His estimation was that the construction/Installation phase would require more like 6.3 FTE and the operation/maintenance phase 0.75 FTE.

60. The jobs created during the construction phase will mainly be carried out by specialist firms based regionally or nationally. For the ongoing basic maintenance of the wind turbine and site, BRCT plan that a local person will be trained to take on this role. This will provide direct benefit to an individual in skills training, employment and income.

Other economic benefits

61. The opportunity for shareholding in Blueskin Energy Ltd (BEL) by community members means that there will be a flow of dividends back to individuals in the community through this means. A number of the supporting submitters noted the value of enabling locals to invest, as

\textsuperscript{25} BERL Economics (2012). Economic Benefits of Windfarms in New Zealand
profits from the wind development will go back into the community through this means. The survey results described above show that there is a strong interest in such investment, from small to larger amounts.

62. As explained in Jacinta Ruru’s evidence benefits will also flow back to the community at a collective level through BEL’s obligation to return a dividend to its owner, the BRCT. BEL’s owner, BRCT, expects to receive at least an average of $100,000 per annum in dividends over the lifetime of the Blueskin Turbine. Evidence from Jacinta Ruru sets out how the BRCT intends to utilise and distribute the dividend, including the specific example of solar panels for local schools. The BRCT also intend to share their experiences and knowledge of establishing the turbine with other interested communities in Aotearoa New Zealand.

63. Activities facilitated by the dividend will deliver social benefits to the Blueskin Bay community, and the BRCT’s information sharing will deliver social benefits to New Zealand more generally.

64. Supporting submitters note that the fund will enable community initiatives that are currently not possible, or difficult to otherwise fund. They also note that it will enable BRCT to spend less time applying for grants or relying on council or other social agencies to further its initiatives. Having seed money for projects also means it is often easier to obtain additional funding for projects. The financial benefits to the community are therefore potentially wider than simply the dividend itself.

Other potential economic benefits

65. As a number of submitters have pointed out, the turbine’s proximity to Dunedin and easy access make it a likely tourist attraction, and there is the potential for turbine tours to be developed as part of BRCT’s activities or as a local enterprise. BRCT has discussed this idea with the landowner. The current access agreement does not allow for public access and should such a desire become concrete, then a separate agreement with the landowner will be necessary.
Impacts on property values

66. Some submitters raised concerns about effects of the turbine on property values in the vicinity. In their review of wind farm studies internationally, Ellis and Ferraro\textsuperscript{26} found that in most studies there is little or no discernible impact on property price. Two European studies were found in which an impact on property prices was observed, varying from 6-9%, in locations where there were multiple turbines. In contrast, many other studies have shown no statistically significant impact. A study in New Zealand of 945 house sales near Ashurst, near the Te Apiti and Tararua wind farms concluded that there was no significant impact on the property values (the properties were located between 2.5 and 6km from visible turbines)\textsuperscript{27}. A US study that included 1198 property transactions within 1 mile of a turbine also concluded that there was no statistical evidence of impact on property values\textsuperscript{28}.

67. I conclude that if there is an effect on property values at all, it is likely to be minor.

COMMUNITY AND GOVERNANCE IMPACTS

Cultural impacts

68. The submission from Kati Huirapa ki Puketeraki, within whose rohe the proposed wind turbine is situated, is strongly in support as they see that the proposal fits with their longterm vision about multi-generational thinking. They are concerned about climate change and welcome local energy generation. They endorse the return to the local community. To them, the proposal represents kaitiakitanga. A copy of the Kati Huirapa ki Puketeraki submission is attached at Appendix C.

Viability, local benefits and governance

\textsuperscript{28} Hoen, B. (2014). A spatial hedonic analysis of the effects of wind energy facilities on surrounding property values in the United States. Environmental Energy Technologies Division, Lawrence Berkeley National Laboratory.
69. Many of the submitters in support perceive the proposal as bringing a range of local benefits, and show no concerns about the proposed governance arrangements. Opposing submitters express concerns about these issues.

70. Questions about the financial viability, benefits and governance of the wind development have (understandably) been asked since the outset of the idea. Matt Hoffman’s 2008 research (involving 13 interviews of residents about their views on small-scale community-owned wind generation) concluded that Waitati residents were interested in generating energy at the local level, but considered that there would be some difficult financial, political and engineering issues to overcome. Seth Gorrie’s research over the summer of 2010-2011 examined public perceptions of what was by then the Blueskin wind project. He interviewed 16 people in the Blueskin area, all but one selected at random. Questions or concerns that were raised included whether the electricity would come direct to the Blueskin Bay households (and whether this would be cheaper); the sources of funding; how the electricity market operated; the structure and governance arrangements; and the locus of control if there were non-community investors. The Open Days in 2011, as noted above, also raised similar questions.

71. Submissions by those opposing the proposal take these same themes further: concerns about the lack of a clear business case, lack of any guaranteed return to the community, and lack of local control. Some of the submissions indicate that they may have originally been interested in the proposal but have become negative about it as the proposal has become more concrete.

72. My analysis is that four main issues have led to this disenchantment.

73. Firstly, the initial concept, discussed at early meetings, was for ‘community energy’ – that is, for the wind turbine/s to feed directly into the Waitati substation and for the local community to thereby receive the ‘electrons’ from their turbine, and alongside this receive cheaper electricity than they currently do. Once the BRCT started to become familiar with the structure of the energy market, it became clear that...
this was not possible. Electricity market regulations make it extremely challenging to become a small scale retailer with dependence on one renewable generation asset, and it was not feasible for the community to become a retailer. Instead, energy from the turbines would have to be traded on the energy market or sold to a guaranteed purchaser until local market agreements could be formed. The outcome of this is that the benefits from the wind development will not be able to be received by all community members via their power bill, so benefits will need to come by another mechanism and may not be equally felt by all households as was the original concept.

74. Secondly, the initial concept also was for a ‘community owned wind turbine’. Wind testing and financial feasibility studies then showed that small inexpensive turbines would not be viable, and a development within the scope of and optimally economic design would cost up to $6 million. Once this was realised, it became clear that the proposal would require some major external investors alongside local investment.

75. Thirdly, and related to this, the initial concept was for community control of the wind development. With the need for large investors, questions arose as to who would control the development and what the role of the community would be. Was it just going to be another corporate development, disguised as a community development?

76. Finally, the BRCT’s need to withhold information from the public due to commercial sensitivity also raised concerns amongst community members as to the financial viability of the project and what commercial partners were likely to be involved.

77. Although the BRCT has done its best to assure the community that it is commercially viable and that it is still a community project with a high level of local control and benefit, there has clearly been a loss of trust due to the changes in the nature of the project over time. Even though a resource consent application does not need to prove commercial viability, some of the submitters see the lack of evidence as a weakness. The tone of some of the submissions in opposition is that they see the BRCT’s plans as an incursion into the community
which will bring no benefits (or at least no guaranteed benefits), and will also lack local control.

78. International research on wind farms (Ellis & Ferraro 2016) shows that trust has a key role in community acceptance. In some cases, dissatisfaction with decision-making processes can be the prime reason for opposing a wind energy project. The loss of trust engendered by the changes to the original vision, along with confidentiality requirements, has, I would suggest, driven much of the opposition by a segment of the community.

79. The BRCT has proposed solutions to these concerns in its application.

80. In relation to the first issue, it is by its own deed and BEL’s constitution compelled to return dividends from this project to the community in ways described in the evidence of Jacinta Ruru.

81. In relation to the second issue, up to $2 million will be invited from local investors, with the remainder sourced from large investors. Up to 40% of the costs can be debt equity. There is of course the possibility that the wind development will prove not to be sufficiently attractive to local investors. This could result in an imbalance in favour of major investors. Mitigating this concern BRCT’s reporting of strong interest in investing from local (Blueskin and Dunedin), which is also borne out in the consultation reported above.

82. In relation to the third issue, Scott Willis and Jacinta Ruru have given evidence as to the corporate structure. BEL will always be 100% community-owned and controlled by BRCT. BEL will be the majority owner (General Partner) of the project. A number of Limited Partners will then invest: some of these are anticipated to be institutions, others a consolidation of multiple small investors. As the General Partner, BEL has sole management responsibility for the development. Limited Partners, whether institutions or individuals, simply receive a return on their investment.

83. The issue of commercial sensitivity is a fact of life with most developments. I understand that some details will be able to be
disclosed at a later date once the planning decision is finalised and/or there is a share offer.

84. I conclude that submitters’ concerns about lack of local benefits and lack of local control are addressed by the design of the governance relationship between BRCT and BEL; the opportunity for large and small local investment, and the BRCT’s commitment to distributing a dividend to community projects.

Community division

85. While supporters of the proposal see the proposal as strengthening the community, some of the submissions in opposition expressed concern that the wind proposal has ‘divided the community’. It is clear from the submissions that there is both strong support and strong opposition to the proposal, which leads to the impression that the community consists of two camps of starkly opposing views about the desirability of the wind development.

86. Research undertaken on the views of people who do not make submissions\(^{29}\), which interviewed submitters and non-submitters to several NZ wind farm proposals, found that non-submitters had a range of supportive, ambivalent and opposing views. They were less likely to have strong feelings about the proposal and displayed less extreme views either way. The paper concluded that non-submitters had equally valid views to submitters, but that these were rarely able to be taken into account at RMA hearings.

87. Applying these findings to the Blueskin situation it is plausible that the majority of the Blueskin population – the non-submitters – hold a continuum of views from supportive to ambivalent to unsupportive, but that these views are less strongly held than the views expressed in submissions. How these views are spread is unknown as this would require surveying every individual in the Blueskin area. What can be safely assumed is that the community will not be as seriously divided as might appear from the submissions alone - there will be many

shades of grey in the community as a whole. The fears expressed about a divided community, I conclude, are unlikely to be borne out over time.

FUTURE LEGACY

Learning

88. From an early stage of the community wind farm concept, it has been perceived as a ‘first’ for New Zealand. The proposal has forged new ground as to how a small scale community initiated wind development could get established within a regime which was largely set up to respond to large commercial developers. Being the first has involved considerable learning by BRCT that can now be passed on to other communities looking to undertake similar projects. There has been interest in the proposal from government agencies for this very reason, and the ‘Blueskin People Power’ report was commissioned by EECA to assist other communities by sharing what has been learnt about process.

89. One of the benefits of the proposal therefore is being able to be an exemplar of how small scale community initiated wind farms (or other generation schemes) can fit into the regulatory framework and electricity market, and the stages that need to occur to get there. This is also one of the benefits articulated by Hepburn Wind, discussed previously. A number of supporting submitters made similar points, such as the Blueskin wind project being an exemplar for future of low carbon, locally owned energy generation.

90. The submission by the Waitati School Board of Trustees also sees the turbine as offering many opportunities for learning for school children, including energy physics and the relationship between energy and greenhouse gases. They also see it as a potential source of pride for the children as a visible symbol of collective endeavour and resilience. This submission is attached at Appendix D.

91. The Blueskin turbine thus offers positive opportunities for learning at a local, regional and national scale.
Identity and symbolism

92. A number of the submitters in support of the proposal see the wind turbine as becoming a positive symbol, and a signal of the community’s commitment to a low-carbon future. Having a turbine in the community is seen as a visible reminder of where electricity comes from, and of the community’s commitment to a low-carbon future. A number state that they would like the visual experience of seeing the turbine generating, both in its own right and also as a symbol of the community and its aspirations. The evidence of Jacinta Ruru is an example of such a sentiment.

Emissions reduction

93. The Blueskin turbine will add to the renewable generation capacity of New Zealand, and the power will flow into Dunedin city. There are thus benefits at the district level, in helping Dunedin City with its aspirations to reduce the City’s greenhouse gas emissions and increase its renewable energy supplies, which are explicitly stated in Goal 1 (“Dunedin is resilient and carbon zero”) of DCC’s Environment Strategy 2016-2026. There are also benefits at a national level in assisting the New Zealand Government to get to its target of 90% renewable generation, and assisting with its GHG emissions commitments.

94. These points are also made by a number of the submitters in support and in the evidence of Grenville Gaskell.

PREDICTIONS (based on comparable projects)

If consent is granted

95. In New Zealand, the Brooklyn turbine is the longest-established wind turbine and one which has become very much part of the identity of the suburb of Brooklyn. Notably, the Brooklyn turbine is only 550 metres from the nearest houses.

96. When the 22-year old turbine was reaching the end of its life, Meridian asked Wellingtonians whether they wanted to keep it. A Dominion Post reader survey showed 85% wanted to repair or replace it. Planning
consent was granted with no appeals, and the new, taller turbine began operating in April 2016. The turbine is 3km from the city’s CBD and is a popular walk and tourist attraction. This is an example of how the passage of time can build identity and a positive attitude to wind developments.

97. While the Blueskin community is not united in support of the wind development, it is founded in a widespread community aspiration for working together for a resilient future. The Blueskin Turbine, unlike Brooklyn, will have a direct financial benefit to the community and will also be governed by the BRCT. As with Hepburn Wind, in the long term, the funding into community projects should improve resilience and wellbeing at a local level, while the renewable electricity contributes to New Zealand’s low-carbon future.

If consent is declined

98. The main impact of declining consent will be on the ability of the BRCT to maintain its activities to develop community resilience in Blueskin Bay. Given BRCT’s commitment to the community it is possible that BRCT will continue to try and carry out these activities, albeit on the ‘treadmill’ of applying for short term grants which creates continual uncertainty about survival. It is also possible that BRCT, disheartened by the loss of their flagship project, will lose energy and commitment and ultimately fail.

CONCLUSION

99. Guided by the IAIA criteria for social impact assessments, my conclusions are as follows:

People’s way of life – how they live, work, play and interact with one another on a day-to-day basis

100. The Blueskin turbine will have minimal direct impact on day-to-day life. Apart from during the construction phase, it will generate a small amount of local employment in the maintenance of the turbine. Indirectly, the income from the community dividend should positively
affect everyday life through projects determined by the community and for the benefit of the community.

Impacts on culture – their shared beliefs, customs, values and languages

101. The proposal is aligned with Māori cultural values as expressed by Kati Huirapa. It also is founded in values and aspirations shared by many community members.

Their community – its cohesion, stability, character, services and facilities

102. Due to the current dissention about the turbine proposal, there is division between some members of the community at present. Given the U-shaped curve that is common to most wind farm proposals, it is likely that this will fade and overt support will become more widespread. The community funding from the turbine will have positive impacts by assisting with community services and facilities.

Their political systems – the extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose.

103. Compared to commercial wind developments, the Blueskin turbine offers a high level of democratisation. Blueskin Energy Ltd will be controlled by BRCT, a community trust. Decisions regarding the distribution of the community dividend will be partly made by BRCT and partly made by an organisation set up to represent community interests independently of BRCT.

Their environment – the quality of the air and water that people use, the availability and quality of the food they eat, the level of hazard or risk, dust and noise they are exposed to; the adequacy of sanitation; their physical safety; and their access to and control over resources

104. The direct environmental impacts of the wind turbine are being covered in other evidence but I understand that these are generally not considered to be significant, except for a small number of proximate dwellings who will experience a visual change in the nearby landscape. In the long term, the wind turbine will contribute to
reducing the carbon emissions from New Zealand’s electricity generation, and thus contributing to reducing the threat of climate change.

Their health and wellbeing – health is a state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity

105. International research shows that wind turbines are unlikely to result in direct impacts to human health. The use of the community dividend for projects such as home insulation can contribute to improving the health of the community.

Their fears and aspirations – their perceptions about their safety; their fears about the future of their community, and their aspirations for their future and the future of their children.

106. Supporting submitters see the Blueskin turbine as meeting their aspirations for their and their children’s future. Some opposing submitters are currently fearful about the implications of a wind turbine for reasons including environment, health, governance and community division. In my opinion, as discussed above, I consider that these fears are largely unfounded, and that once established, the positive impacts of the Blueskin turbine will become evident.

107. Overall I conclude that any negative social impacts of the proposal are no more than minor, and the positive social impacts are likely to be significant.

Janet Stephenson

26 January 2017
APPENDIX A: RELEVANT RESEARCH PUBLICATIONS


https://ourarchive.otago.ac.nz/handle/10523/6594
APPENDIX B: LOCATION OF WAITATI AND WARRINGTON AREA UNITS AND EVANSDALE AREA UNIT MESHBLOCKS INCLUDED IN DEMOGRAPHIC DATA FOR BLUESKIN AREA

Waitati, Evansdale, and Warrington Area Units
Appendix C

Kati Huirapa ki Puketeraki submission
This is what I sent from the Runaka

2 messages

Justine Marshall <admin@puketeraki.nz> Thu, Nov 26, 2015 at 11:51 AM
To: "Craig Marshall (newnes@icloud.com)" <newnes@icloud.com>, Scott Willis
<blueskinenergy@gmail.com>

Kati Huirapa Runaka ki Puketeraki, the local tangata whenua in East Otago, and based in Karitane, believes that this development fits with its long term vision of 'for our children and our children after us'. We are concerned about the impacts of climate change and welcome local energy developments that increase the resilience of our the Blueskin Bay community to provide for climate change. Protection of our people and our ability to gather resources for the next generation are better provided for where communities think beyond the square in reducing greenhouse gas emissions. Everyone must do their bit and this development ticks all the boxes for a bigger picture, combined response. We are well aware of the finite shelf life of large scale hydro and we understand the necessity of creating local community sized energy producing projects if we are to combat climate change in our rohe.

We are proud of what our community is achieving in Blueskin Bay and would like to see this development proceed in its entirety. We are happy with all aspects of the consent application.

PLEASE NOTE MY NEW EMAIL ADDRESS IS ADMIN@PUKETERAKI.NZ AND UPDATE YOUR ADDRESS BOOK. OUR WEBSITE HAS ALSO CHANGED TO WWW.PUKETERAKI.NZ

Nga mihi

Justine Marshall
Office Manager
Kati Huirapa Runaka ki Puketeraki
121 Grimness St, C/- Karitane PDC 9440, Otago
P: (03) 465 7300 F: 465 7318
admin@puketeraki.nz
www.puketeraki.nz
Runaka Office hours: 9.00am – 4.00pm Monday to Friday
This resource consent application submission has been made via the Council website on **02 Dec 2015 10:37am**. The details are listed below.

**Personal information**

Name: Kati Huirapa Runaka ki Puketeraki Inc Soc  
Address: 121 Grimness St Karitane 9440 Dunedin  
Contact phone: 03 465 7300  
Fax: 03 465 7318  
Email address: admin@puketeraki.nz

**Submission details**

Consent number: LUC-2015-469  
Position: I support this application  
Wish to speak? Yes  
Present jointly to hearing? No  
Parts of application that submission relates to: All

We wish to support the application of Blueskin Energy Limited to install a small windfarm on Porteous Hill. We see this as a significant project operating on a community wide, bioregional and multi generational level and as such it fits with many of our beliefs and goals as manawhenua. We want to acknowledge that the period and level of engagement and consultation about this project has been high and thoughtful between the applicants and the runaka. We endorse the commitment of the trust organising this project to return a dividend to the community and would see this as an opportunity to build and strengthen relationships and projects with the runaka and wider communities in the Blueskin Bay Area. This could be on several levels including environmental and ecological restoration, support for whanau to deal with climate change impacts, support to whanau and local organisations to become more energy efficient and resilient. We see this as a positive project representing an active kaitiaki or guardianship duty on behalf of the wider Blueskin Bay community. We applaud the stated goals of the project to fund an ongoing response to climate change locally. We are already concerned about the capacity of stressed eco-systems in this rohe to cope with...
the added stress and complications brought about by climate change, that is, changing sea levels, temperatures and weather patterns. We hope that this project succeeds as intended and is able to support mitigation of these impacts for our taonga species in the area. We believe that the proposed windfarm project sends a clear message to our tamariki and rangatahi that the current generation of pakeke (adults) in this community have taken up the responsibility and the challenge to act like true guardians of the land and natural resources. This is an important message and not one that is obviously seen elsewhere. We believe that the proposed windfarm has the potential to become a tourist attraction as they have in other parts of the country. We see this as an opportunity to not only introduce visitors to the beauty and history of our area but that it creates further opportunities for local businesses. We have listened to respected ecologists at Wildlands suggest need for ongoing monitoring of birds at various times of day and year to monitor any concerns to birds and would support this as a condition of granting consent.

**Desired decision**

To grant consent for the windfarm in its entirety
2 December 2015

John Sule
Dunedin City Council
PO Box 5045
Dunedin 9054

Tēnā koe John

Re: LUC-2015-469 – Blueskin Energy Ltd Windfarm Church Road consent application

We wish to support the application of Blueskin Energy Limited, in its entirety, to install a small windfarm on Porteous Hill, in East Otago. We see this as a significant project operating on a community wide, bio-regional and multi-generational level and as such it fits with many of our beliefs and goals as manawhenua.

We want to acknowledge that the period and level of engagement and consultation about this project has been high and thoughtful between the applicants and the runaka.

We endorse the commitment of the trust organising this project to return a dividend to the community and would see this as an opportunity to build and strengthen relationships and projects with the runaka and wider communities in the Blueskin Bay Area. This could be on several levels including environmental and ecological restoration, support for whanau to deal with climate change impacts, support to whanau and local organisations to become more energy efficient and resilient.

We see this as a positive project representing an active kaitiaki or guardianship duty on behalf of the wider Blueskin Bay community. We applaud the stated goals of the project to fund an ongoing response to climate change locally. We are already concerned about the capacity of stressed ecosystems in this rohe to cope with the added stress and complications bought about by climate change, that is, changing sea levels, temperatures and weather patterns. We hope that this project succeeds as intended and is able to support mitigation of these impacts for our taonga species in the area.

We believe that the proposed windfarm project sends a clear message to our tamariki and rangatahi that the current generation of pakeke (adults) in this community have taken up the responsibility

Marae: Apes Road, Puketeraki. Office, 121 Grimness Street C/O Post Office, Karitane, 9440,
Phone (03) 465 7300. Fax (03) 465 7318. Email: manager@puketeraki.co.nz
and the challenge to act like true guardians of the land and natural resources. This is an important message and not one that is obviously seen elsewhere.

Kāti Huirapa Runaka believes that the proposed windfarm has the potential to become a tourist attraction as they have in other parts of the country. We see this as an opportunity to not only introduce visitors to the beauty and history of our area but that it creates further opportunities for local businesses.

We have listened to respected ecologists at Wildlands suggest need for ongoing monitoring of birds at various times of day and year to monitor any concerns to birds and would support this as a condition of granting consent.

Kāti Huirapa wishes to speak to a consents hearings committee in support of this submission, if it arises.

Ngā mihi

[Signature]

Justine Marshall
Office Manager

Maree: Apes Road, Puketeraki. Office: 121 Grimness Street C/o Post Office, Karitane, 9440,
Phone (03) 465 7300, Fax (03) 465 7318. Email: manager@puketeraki.co.nz
2.0 SCOPE OF THE SUBMISSION

This submission relates to the proposed community owned wind farm in its entirety.

3.0 REASONS FOR THE SUBMISSION

Kāti Huirapa Rūnaka ki Puketeraki wish to ensure that wāhi tapu and wāhi taonga sites are appropriately protected.

Although there are no recorded Māori archaeological sites within the boundary of the above proposal, there is a recorded Māori archaeological site in the vicinity of the proposed community owned wind farm (see Appendix 1). Therefore, there is potential to disturb unrecorded sites during earthworks. Contractors undertaking earthworks as part of this development need to monitor for artefacts or archaeological material and follow an accepted discovery process. The adoption of an Accidental Discovery Protocol is recommended to manage the discovery of artefacts or archaeological material.

4.0 DECISION SOUGHT

Kāti Huirapa Rūnaka ki Puketeraki submits that the resource consent should be subject to an Accidental Discovery Protocol condition, as set out in Appendix 2.
Appendix 1
Recommended Accidental Discovery Protocol Condition

In the event that an unidentified archaeological site is located during works, the following applies:

(a) Work shall cease immediately at that place and within 20m around the site.
(b) The contractor must shut down all machinery, secure the area, and advise the Site Manager.
(c) The Site Manager shall secure the site and notify the Heritage New Zealand Regional Archaeologist. Further assessment by an archaeologist may be required.
(d) If the site is of Maori origin, the Site Manager shall notify the Heritage New Zealand Regional Archaeologist and the appropriate iwi groups or kaitiaki representative of the discovery and ensure site access to enable appropriate cultural procedures and tikanga to be undertaken, provided that all statutory requirements under legislation are met.
(e) If human remains (koawi tangata) are uncovered the Site Manager shall advise the Heritage New Zealand Regional Archaeologist, NZ Police and the appropriate iwi groups or kaitiaki representative and the above process under (d) shall apply. Remains are not to be moved until such time as iwi and Heritage New Zealand have responded.
(f) Works affecting the archaeological site and any human remains (koawi tangata) shall not resume until Heritage New Zealand gives written approval for work to continue. Further assessment by an archaeologist may be required.
(g) Where iwi so request, any information recorded as the result of the find such as a description of location and content, is to be provided for their records.
Appendix D

Waitati School Board of Trustees submission
This resource consent application submission has been made via the Council website on 02 Dec 2015 3:09pm. The details are listed below.

**Personal information**

Name: Waitati SChool BOT  
Address: 1121 Mt Cargill Road 9085 Waitati  
Contact phone: (03)4822888  
Fax: (03)4822888  
Email address: office@waitati.school.nz

**Submission details**

Consent number: LUC-2015-469  
Position: I support this application  
Wish to speak?: No  
Present jointly to hearing?: No

We are a committed Enviro-School, we engage with the pupils in our school to make connections and demonstrate responsible active care for our natural world. We believe the windmills will become a source of pride to the children growing up in Waitati. They will be able to tell the story of how they generate energy without making pollution and why this is important with regard climate change. They will identify the windfarm as symbol of our local community’s commitment to good environmental practice. We look forward to the view from Waitati being enhanced by three windmills on the Kilmog. Much like the TV/Radio mast on Mt Cargill they will quickly become part of the landscape here. There are now several windmills around the Waitati district and they are becoming normal. However unlike the Mt Cargill TV/Radio mast we believe the windfarm will become a tourist attraction as it is in Brooklyn in Wellington. We look forward to the ongoing community dividend generated by the project and predicted to be around $100000 per annum being used to support a wide variety of new projects and developments in the community. As a school we have thoroughly researched the potential to install solar panels on the school roof. Although it makes perfect sense and would save Waitati School up to $8000 annually, we are not allowed to use either our operational grant or the capital funding provided by Ministry of Education. Furthermore schools typically struggle to raise money from public grants as funders see schools as the responsibility of the state. So a local fund like the proposed community dividend from the windfarm could quickly produce a
lasting benefit to many local families by freeing up $8000 a year to spend on improving the educational opportunities of our children.

This has been one of the most exhaustively discussed and consulted ideas over the last five or six years locally. We have had several class visits with staff and visitors from BRCT and they are part of our school community. Pupils and staff have enjoyed regular field trips to the wind monitoring equipment on Porteous Hill and we are sure the proposed windfarm will create more and more opportunities to learn about the physics or electricity generation and local wind patterns. The children at school also seem well aware of the proposed windfarm and as far as we can tell they all seem to support it.

We wish to support the resource consent application of Blueskin Energy Limited to develop a windfarm on Porteous Hill.
We wish to support the resource consent application of Blueskin Energy Limited to develop a windfarm on Porteous Hill.

We are a committed Enviro-School, we engage with the pupils in our school to make connections and demonstrate responsible active care for our natural world. We believe the windmills will become a source of pride to the children growing up in Waitati. They will be able to tell the story of how they generate energy without making pollution and why this is important with regard climate change. They will identify the windfarm as symbol of our local community’s commitment to good environmental practice.

We look forward to the view from Waitati being enhanced by three windmills on the Kilmog. Much like the TV/Radio mast on Mt Cargill they will quickly become part of the landscape here. There are now several windmills around the Waitati district and they are becoming normal. However unlike the Mt Cargill TV/Radio mast we believe the windfarm will become a tourist attraction as it is in Brooklyn in Wellington.

We look forward to the ongoing community dividend generated by the project and predicted to be around $100000 per annum being used to support a wide variety of new projects and developments in the community.

As a school we have thoroughly researched the potential to install solar panels on the school roof. Although it makes perfect sense and would save Waitati School up to $8000 annually, we are not allowed to use either our operational grant or the capital funding provided by Ministry of Education. Furthermore schools typically struggle to raise money from public grants as funders see schools as the responsibility of the state. So a local fund like the proposed community dividend from the windfarm could quickly produce a lasting benefit to many local families by freeing up $8000 a year to spend on improving the educational opportunities of our children.

This has been one of the most exhaustively discussed and consulted ideas over the last five or six years locally. We have had several class visits with staff and visitors from BRCT and they are part of our school community. Pupils and staff have enjoyed regular field trips to the wind monitoring equipment on Porteous Hill and we are sure the proposed windfarm will create more and more opportunities to learn about the physics or electricity generation and local wind patterns. The children at school also seem well aware of the proposed windfarm and as far as we can tell they all seem to support it.

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