

IN THE MATTER

of the Resource Management Act
1991

AND

IN THE MATTER

of hearings by the Board of Inquiry on
the Proposed National Policy
Statement for Renewable Electricity
Generation

STATEMENT OF EVIDENCE BY BRIDGETTE MAREE MALCON

1. My full name is Bridgette Maree Malcon. I am employed by Ryder Consulting Limited, as an Associate Planner. Ryder Consulting Limited is an environmental consultancy that specialises in the provision of ecological, planning and project management services, with offices in Dunedin, Christchurch and Tauranga.
2. I am a qualified and experienced environmental planning and resource management professional, having graduated from the University of Waikato in 1999. I hold a Bachelor of Social Science with Honours, specialising in Resource and Environmental Planning and Geography.
3. I have been employed by Ryder Consulting Limited as an Associate Planner for approximately one year. In this position I undertake a number of environmental planning and project management related tasks, including providing advice to, and preparing submissions for various clients.
4. I have in excess of eight years experience in private consultancy, corporate and local government planning. Prior to working for Ryder Consulting I was employed by TrustPower Limited as a Senior Environmental Officer. Preceding TrustPower Limited, I was an environmental planning consultant in Tauranga (Harrison Grierson Consultants Limited) and in Gisborne (Turnpenny Associates Limited). I also worked as a policy planner / consent processing officer for a unitary authority (Gisborne District Council).

MY ROLE

5. I have been commissioned to present this evidence on behalf of Pioneer Generation Limited (**'Pioneer'**). Mr. Peter Mulvihill, Pioneer's Asset Manager is in attendance with me today and will respond to any questions raised, providing

examples, and elaborating as necessary with regard to Pioneer and its renewable electricity generation schemes / facilities.

EVIDENCE SUMMARY

6. In my evidence I will briefly recap Pioneer's submission:
 - Outlining a brief background to Pioneer and its renewable electricity generation schemes;
 - Providing an overview of Pioneer's position with regard to the Proposed National Policy Statement for Renewable Electricity Generation ('**proposed NPS**');
 - Detailing Pioneer's comments, concerns and recommendations regarding the proposed NPS; and
 - Providing a conclusion.

PIONEER GENERATION LIMITED

7. Pioneer Generation Limited ('**Pioneer**') is a small renewable electricity generation Company based in Central Otago. Pioneer owns and operates twelve Hydroelectric Power Generation Schemes, which it considers to be 'small-scale'. These Schemes range in size from 400kW to 7.6MW and are located in Central Otago and Southland where they are embedded within the local distribution networks, producing up to 32MW of electricity for the national grid.
8. Pioneer is owned by the Central Lakes Trust, which was formerly Central Electric Limited, until the Electricity reforms of 1998 enforced the sale of parts of the business. The generation division was retained and renamed 'Pioneer Generation Limited'.
9. The Company's head office is in Alexandra, with staff working from an office in Ranfurly and stations at Teviot and Monowai. All of its stations are automated and can operate unmanned.
10. Pioneer's history is well established, with its predecessors leading the way in hydroelectric power development from the early 1900's. Pioneer has recently consented the Wye Creek Hydroelectric Power Generation Scheme and has also recently consented a new Scheme (the Kowhai Hydroelectric Power Generation Scheme) for construction.

11. The Company is continuously looking for new development opportunities and enhancements to its existing hydroelectric power generation schemes. Pioneer is also actively researching and pursuing opportunities in small-scale wind development less than 10MW. The company currently has consent for 3 – 750 kW wind turbines adjacent to the Horseshoe Bend Hydroelectric Power Station, which is located near Roxburgh. Installation of these turbines is due to commence in September 2009. In addition the Company is currently collecting wind speed data from a number of other potential sites.
12. Pioneer's smaller, local renewable hydroelectric power generation schemes provide a range of benefits both to their customers and nationally including, but not limited to, additional security of renewable supply and lower transmission losses, which in turn lead to a reduced need for costly transmission capacity upgrades, or new transmission lines to transport electricity between regions.
13. While Pioneer supports the vision and objective of the proposed NPS it is particularly concerned that, as currently drafted, it will unnecessarily restrict hydroelectric generation development and enhancement projects in New Zealand. The proposed NPS may also create additional impediments to the consenting and / or development, expansion, or enhancement of Pioneer's existing hydroelectric power generation assets.

COMMENTS, CONCERNS AND RECOMMENDATIONS TO THE PROPOSED NPS

OBJECTIVE

14. Pioneer supports the Objective of the proposed NPS. The Company considers that recognition of the national significance of renewable electricity generation by promoting the development, upgrading, maintenance and operation of new and existing renewable electricity generation activities is appropriate. Further, Pioneer considers that the objective, coupled with appropriate policies will assist in achieving the target that 90 percent of New Zealand's electricity demand be sourced from renewable electricity by 2025.

Objective: Relief Sought

15. Pioneer considers that the Objective of the proposed NPS should be retained, unmodified.

POLICY ONE

16. While Pioneer is generally supportive of Policy One, the Company considers that this Policy could be strengthened by further clarifying the list of benefits associated with renewable electricity generation and also by further clarifying that this policy relates to 'all' renewable electricity generation activities.
17. Pioneer understands that Policy One does not provide an exclusive list of benefits, in that it uses the wording "*these benefits may include, but are not limited to:*"; however the Company considers that the insertion of additional benefits into Policy One will help emphasize that there are numerous valid and significant benefits associated with renewable electricity generation activities. This is particularly important in the resource consent processing process, where the detail of adverse effects and how they may be avoided, remedied or mitigated is carefully examined and argued by the applicant and submitters alike, with often little detail paid to the benefits that renewable electricity generation activities may induce.
18. Further, given that the government has determined that 90 percent of electricity generated in New Zealand should be derived from renewable energy sources by 2025, and indeed this target has been included within the Objective of the proposed NPS, Pioneer consider that importance must be given to the benefits of renewable electricity generation activities so that decision makers are made fully aware of the national importance of the same.
19. Pioneer considers that some of the additional benefits of renewable electricity generation activities may include:
 - employment opportunities, particularly during the construction phase of a renewable electricity generation project;
 - reductions in transmissions losses at a local scale, thus reducing costs to consumers;
 - reductions in the need for costly transmission capacity upgrades, or new transmission lines to transport electricity between regions;
 - the ability to co-locate with existing land uses, thus enabling productive land to continue to be utilised and developed;
 - assisting the government to achieve international climate change obligations; and
 - maintaining or enhancing New Zealand's reputation as a clean, green nation.
20. Pioneer is a prime example of how renewable hydroelectric power generation schemes can co-exist with other land uses and activities. For example the Falls, Fraser and Teviot Hydroelectric Power Generation Schemes are all

linked to Irrigation Schemes, which have mutual benefits in terms of the headworks infrastructure utilised, such as the Falls, Fraser and Lake Onslow storage reservoirs. This association is mutually beneficial to Pioneer and the associated Irrigation Schemes who share the costs associated with operating and maintaining this infrastructure.

Policy One: Relief Sought

21. Pioneer considers that Policy One should be amended as follows:

The benefits of renewable electricity generation activities, at any scale, are of national significance. Decision-makers must have particular regard to the national, regional and local benefits relevant to all (new and existing) renewable electricity generation activities. The benefits may include, but are not limited to:

- i. maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions and assisting government to achieve international climate change obligations;*
- ii. maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;*
- iii. maintaining or reducing transmission losses at a local scale; and*
- iv. maintaining or enhancing New Zealand's reputation as a clean, green nation.*

POLICY TWO

22. Pioneer agrees that that renewable electricity generation projects can be constrained by those issues as set out within Policy Two.
23. Pioneer considers, however, that securing access to land is also key to the development of renewable electricity generation and that the proposed NPS should be extended to provide direction to the removal of barriers of access to land, particularly with respect to conservation estate land.
24. While Pioneer recognizes that conservation estate land is not administered under the Resource Management Act 1991 ('RMA'), Pioneer considers that it is extremely difficult to advance renewable electricity generation proposals that traverse such land, thus often influencing where renewable electricity generation projects are able to be located.
25. Pioneer further considers that advocating in support of such access, or as a minimum, not compounding this problem, via district and regional planning documents would be an appropriate resource management response.

Policy Two: Relief Sought

26. Pioneer considers that Policy Two should be amended as follows:

When considering measures to avoid, remedy or mitigate the adverse environmental effects of renewable electricity generation activities, consent authorities must have particular regard to the constraints imposed on achieving those measures by:

- i. the nature and location of the renewable energy source;*
- ii. the barriers and / or impediments to accessing the renewable energy source and renewable generation development associated with the same;*
- iii. logistical or technical practicalities associated with developing, operating or maintaining the proposed renewable electricity generation activity;*
- iv. the nature and location of existing renewable electricity generation activities; and*
- v. the location of existing structures and infrastructure including, but not limited to, roads, navigation and telecommunication structures and facilities, the local electricity distribution network, and the national grid.*

POLICY THREE

27. Pioneer considers that Policy Three should be deleted in its entirety. This policy is not consistent with the vision and objective of the proposed NPS as it will unnecessarily, and without justification, restrict hydroelectric generation development, enhancement and consenting of existing hydroelectric power generation schemes.

28. Any 'lack of reversibility' will amplify the hurdles faced by generators when trying to consent hydroelectric power generation proposals as Policy Three will effectively allow for decision makers to consider if an adverse effect is created by a proposal; and have particular regard to the degree to which that adverse effect is reversible. This in turn could lead to uncertainty for investment and time delays in the processing of resource consent applications.

29. Pioneer further considers that that Policy Three amplifies investment / cost by making it more difficult to argue for, and ultimately obtain viable resource consents for hydroelectric power generation proposals.

Policy Three: Relief Sought

Pioneer considers that Policy Three should be deleted in its entirety.

POLICY FOUR

30. From briefly reviewing the submissions to the proposed NPS and attending the first day of the hearing where Mr. Schollum from the Ministry for the

Environment presented and answered questions, it appears that Policy Four has been interpreted differently by various submitters.

31. Indeed in its submission to Policy Four Pioneer's interpretation of the policy was that it appeared to envisage that local government should promote the identification of possible sites for development. The Company understands from the responses provided by Mr. Schollum that this is not the way in which the policy was intended to be interpreted, however, a number of submitters including Pioneer, interpreted the policy in this way. If a policy promoting the identification of possible sites for development were to be implemented, Pioneer considers that unless carefully executed, this will lead to preference being established for existing proposals. Such an outcome would be neither justified, nor in accordance with the proposed NPS's objective to enable 'new' and existing renewable electricity generation activities.
32. Along with being inappropriately time consuming and costly the development of specific areas in which renewable electricity generation development is to occur may lead to increased competition between generators, with hurried resource consent applications prepared and submitted in a bid to secure these areas for development. As a consequence, such applications may not necessarily provide for the most optimal and efficient use of the energy source provided, and may lead to resource consent processing pressures for local government and as a consequence processing delays.
33. Pioneer considers that if Policy Four is to be implemented in this way, that it is more appropriate for local government to highlight areas of constraint in their regional and district plans than to highlight areas where renewable electricity generation proposals may be pursued or developed.
34. The constraint areas should highlight:
 - (i) areas supporting significant environmental values; and / or
 - (ii) areas that are sensitive to development.
35. In terms of activity status that local government is to then apply, Pioneer considers that it would be appropriate to provide for activities within constraint areas as non-complying activities, thus, in order for proposals to be granted consent in such areas they would need to be able to satisfy the tests prescribed in both sections 104B and 104D of the Act. Proposals that do not traverse constraint areas should be able to be argued on their merits, thus classified with a less restrictive activity status according to the level of effects that they may induce.
36. As noted in paragraphs 30 and 31, it appears that there is a differing interpretations of Policy Four and that the policy was intended to be enable

local authorities to initiate the appropriate plan changes, variations and proposed plan processes so as to enable the activities associated with the identification of potential sites, sources of renewable electricity generation and / or investigations into new or emerging technologies and methodologies to occur more easily, for example, the erection of wind monitoring masts to research the viability of a site for a potential wind proposal. Pioneer would be supportive of such a policy as long as it was drafted in a clear and concise manner.

Policy Four: Relief Sought

37. Pioneer considers that Policy Four should be amended as follows:

By the 13 March 2012, local authorities are to notify, in accordance with Schedule 1 of the Act, a plan change, proposed plan or variation to introduce objectives, policies and where appropriate, methods, into policy statements and plans to enable activities associated with:

- i. ~~the identification and assessment by generators of potential sites and energy sources for renewable electricity generation~~
highlight constraint areas where new renewable generation may be restricted, such as areas supporting significant environmental values and / or sensitive areas; and*
- ii. enable activities associated with research-scale investigation into emerging renewable electricity generation technologies and methods.*

38. Alternatively, Pioneer considers that that if the policy is to be implemented so as to enable local government to initiate plan change, variation or proposed plan processes so as to enable activities associated with the identification and assessment of potential sites across the district / region to occur more easily, as opposed to identifying specific sites and energy sources, that Policy Four should be amended as follows:

By the 13 March 2012, local authorities are to notify, in accordance with Schedule 1 of the Act, a plan change, proposed plan or variation to introduce objectives, policies and where appropriate, methods, into policy statements and plans to enable ~~activities associated with:~~

- i. activities associated with the identification and assessment ~~by generators~~ of potential sites and energy sources for renewable electricity generation*
- ii. activities associated with research-scale investigation into emerging renewable electricity generation technologies and methods.*

POLICY FIVE AND THE INTERPRETATION OF SMALL AND COMMUNITY-SCALE DISTRIBUTED RENEWABLE ELECTRICITY GENERATION

39. Pioneer supports the intention of Policy Five and notes that such a policy may go some way to encouraging developers to pursue small-scale electricity

generation proposals, which due to their very nature can be costly to scope, consent and construct.

40. Pioneer considers, however, that the definition / interpretation of 'small and community-scale distributed renewable electricity generation' as being projects that have an installed electricity generation capacity of less than four megawatts is unnecessarily restrictive and not consistent with that promoted by the electricity market, where generation infrastructure that has a capacity of less than 10 megawatts is considered small.
41. All of Pioneer's hydroelectric power schemes have a total capacity of less than 10 megawatts, however the Monowai (7.8MW), Horseshoe Bend (4.3MW), and Teviot Ellis (7.6MW) stations would not be defined as 'small-scale' according to the proposed NPS definition. The Schemes listed are all embedded and consist of structures of a similar scale to Pioneer's existing assets that do fall below the 4 MW threshold. Consequently it is difficult to understand the environmental rationale for the establishment of the 4MW threshold.
42. Pioneer considers that small-scale projects could be defined as projects that have an installed electricity generation capacity of ten megawatts, or less. While accepting that this threshold is arbitrary it is more defensible when the likely environmental effects of Scheme's exceeding 10MW are considered.
43. Further, Pioneer considers that Policy Five should be extended to specifically require local authorities to recognise the national significance of all (both new and existing) renewable electricity generation proposals when notifying their plan changes, proposed plans or variations as required under this policy. This will assist in enabling that the objective of the proposed NPS to be highlighted within local government planning documents.

Policy Five and the interpretation of small and community-scale distributed renewable electricity generation: Relief Sought

44. Pioneer considers that Policy Five and the interpretation of small and community-scale distributed renewable electricity generation, as referred to in Policy Five, should be amended as follows:

By 13 March 2012, local authorities are to notify, in accordance with Schedule 1 of the Act, a plan change, proposed plan or variation to introduce objectives, policies and, where appropriate, methods, into policy statements and plans to recognize the national significance of renewable electricity generation proposals; and to enable activities associated with the development and operation of small and community-scale distributed electricity generation.

INTERPRETATION OF SMALL AND COMMUNITY-SCALE DISTRIBUTED RENEWABLE ELECTRICITY GENERATION

Small and community-scale distributed renewable electricity generation means renewable electricity generation projects with an installed electricity generation capacity of ~~less than four megawatts and excludes offshore wind, tidal and wave generation~~ ten megawatts (or less).

ADDITIONAL COMMENTS

45. While the proposed NPS goes some way to promote the benefits of renewable electricity generation, Pioneer considers that it should be extended to specifically include statements regarding existing renewable electricity generation infrastructure and the consenting and / or enhancing of the same.
46. Pioneer notes that the consenting of existing infrastructure is becoming increasingly difficult, as not only does existing infrastructure face the same impediments as new infrastructure, many of New Zealand's existing Schemes (in particular hydroelectric power generation schemes) were developed at a time when natural and physical resources were managed in a less restrictive manner. The consenting of existing infrastructure has proven to be a time-consuming and costly process. Although Pioneer knows of no situation where resource consents sought for existing renewable electricity infrastructure have been declined, the conditions upon which consent is granted are almost always more restrictive.
47. In order to assist with the processing of resource consent applications associated with existing hydroelectric power generation schemes to save unnecessary debate, and to reduce the level of uncertainty faced Pioneer considers that decision-makers should be guided to have particular regard to the existing environment. This should be defined as '*the environment that exists with the electricity generation infrastructure in place*'. While this definition is confirmed by case law, it is frequently challenged and unnecessarily re-litigated.

Additional Relief Sought

48. Pioneer considers that a new policy should be inserted into the proposed NPS as follows:

When considering proposals to consent and / or enhance existing renewable electricity generation activities, decision-makers must have particular regard to:

- (i) *the benefits associated with maintaining or enhancing the existing generation capacity; and*
- (ii) *the existing environment.*

POLICY EXPLANTION

The existing environment means the environment that exists with electricity generation infrastructure in place.

Conclusion

49. The proposed National Policy Statement for Renewable Electricity Generation seeks to recognise the national significance of renewable electricity generation in New Zealand. While it is acknowledged that an NPS is a step in the right direction, the proposed NPS requires amendment to be of benefit to renewable electricity generation developers and operators.
50. Pioneer considers that as currently drafted the proposed NPS will unnecessarily impede new and existing hydroelectric power generation schemes and the development / enhancement of the same in New Zealand. Without hydroelectric power generation options, it is not likely that the government's target of 90 percent renewable electricity by 2025 will be achieved.
51. I thank the Board for affording me the time to present this evidence on behalf of Pioneer Generation Limited.

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27th of May 2009