

IN THE MATTER of the Resource Management
Act 1991

AND

IN THE MATTER of the Board of Inquiry into
the Proposed National Policy
Statement for Renewable
Electricity Generation

**SUBMISSIONS BY DEBORAH JANE MARTIN, REGIONAL FIELD OFFICER,
ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND
INCORPORATED
11 MAY 2009**

Background

1. My full name is Deborah Jane Martin. I am employed by the Royal Forest and Bird Protection Society of New Zealand Incorporated as Regional Field Officer for the Top of the South region.
2. Each Regional Field Officer has specific areas of expertise and knowledge which is used to progress the key objective of Forest and Bird's constitution:
To take all reasonable steps within the power of the Society for the preservation and protection of the indigenous flora and fauna and natural features of New Zealand, for the benefit of the public including future generations.
3. Forest and Bird has been in existence since 1923, and was formed because of the strong concerns of a community of people within our country (including well known and respected scientists of the time), about the significant degradation of our natural environment. At the time, the large scale felling of forests along with an alarming rate of bird species in decline, were our primary concerns, hence the name.
4. Our organisation now numbers around 38,000 members across the country. Our mission remains the same – to protect the indigenous geological and biological diversity of New Zealand. We are the longest standing, and most widely recognised and respected conservation organisation in the country. Our members continue to include some of the most respected scientists and ecologists in the country – people, who through years of experience in their professional fields, have realised that despite an increase in awareness of the natural values of this country, the race to extinction is still very real for many of our nation's species. The Hitchmough 2005 reclassification of threatened species showed that the number had increased from 2372 in 2002, to 2788¹. The intact ecosystems on

¹ Hughey, KFD, Kerr, GN & Cullen R (2008). *Public Perceptions of New Zealand's Environment*. EOS Ecology: Christchurch.

which these ecosystems depend remains under significant threat from ongoing habitat destruction, and the invasion of pests and weeds.

5. Our submission quoted from the New Zealand Biodiversity website about the issues surrounding our current biodiversity crisis. The critical statement is:

*Although New Zealand was one of the last places on earth to be settled by humans, it has one of the worst records of native biodiversity loss. Fires, land clearance, overexploitation of resources, and introduced plants and animals have had a cumulative effect on native biodiversity. As a result dozens of species have become extinct and an increasing number are now threatened with extinction.*²

6. This should not be underestimated nor diminished. However, in our society today, it is very easy to do so. In the words of international environmental lawyer, Cormac Cullinan³:

Right now the human societies that currently dominate our planet are precipitating what is being described as the sixth mass extinction. Periods of mass extinction have only occurred five times in Earth's 15 billion year history. ...

It is hard to believe, and indeed most people do not believe, that in a few centuries our species has been able to unravel the web of life on this planet so extensively. Worse still, many of us are now bored by the increasingly frequent news of environmental destruction and impending ecological disasters. After all, it is old news that we are messing up the planet.

7. For many years Forest & Bird has lobbied for and advocated at a national and international level for legislation that protects the remnants of the environment we have left. It is because of this lobbying that the Resource Management Act and

² <http://www.biodiversity.govt.nz/picture/biodiversity/state/index.html>

³ Cullinan, Cormac (2002). *Wild Law*. Siber Ink: South Africa.

other environmental legislation exists. Our organisation relies upon the RMA to deliver outcomes that are truly sustainable for our indigenous biodiversity and natural features.

8. As can be seen by the continuing slide in biodiversity and the increasing number of threatened species, the current legislations (for whatever reasons) are failing to sustain our national biodiversity and natural features.
9. A presentation by Landcare Research to the Tasman Biodiversity Forum last week in Richmond quoted Lee *et al* from a 2008 article in the New Zealand Journal of Agricultural Research (51: 457-460) showing that 80% of New Zealanders think the state of our environment is good to very good. The reality is much more critical and the presenter argued that our portrayal of success stories (e.g. kakapo) has been to the disservice of the pressing need to protect our biodiversity. Others, although perhaps aware of this decline have, as highlighted by Cullinan, simply become anaesthetised.
10. In summary, we may have improved our track record in preventing extinctions, but we have not stopped biodiversity declines, our rare ecosystems are not being sustained, and our threatened environments continue to reduce.
11. In addressing you the Board, here today, I will provide a level of detail about specific proposals, but I want to turn the bulk of the time to attending to the philosophical assumptions upon which the proposed NPS has been based. My presentation to you today is not a 'tick box', but a question of 'what boxes should we be considering, and what ones may be absent.' Dealing with the reports statements and unquestioned assumptions (our submission pgs 3 & 4):

12. Failure to address the limits of growth. Sustainable management is the key to the RMA. Lecturer at Otago University, Nicola Wheen⁴ explores the problems with the legislative implementation of sustainability. She quotes the concerns expressed by many about the cumulative effects of ‘small’ impacts, stating “Compromise allows environmental death from a thousand inconsequential cuts.” She goes on to conclude:

The underlying value preference in New Zealand favours development and the management of environmental impact. Without either very clear and uncompromising ecological bottom lines, or a transition to a greener value paradigm, this bias will continue to manifest itself in environmental decision-making.

13. One of the most core bottom lines to recognise is that the physical environment has limits. Real recognition of this fact will result in the development of legislation and statutory documents that accept this limitation as pertinent and the crux of a sustained community of complex planetary life.

14. Robert Costanza, professor of Ecological Economics in Canada, recently visited New Zealand with Massey University. He and others have spent a number of years attempting to shift the economic paradigm to one that is much more sustainable. In a paper, Costanza *et al* (2009)⁵ quoted an international report showing that human use of the earth’s biocapacity is exceeding the regenerative capacity by 25 percent. The paper concludes:

The world financial system is in crisis, partly as a result of overemphasis on material growth at all costs and a neglect of real and balanced development.

⁴ Wheen, N (2002). “A History of New Zealand Environmental Law” in: Pawson E & Brooking T (eds) *Environmental Histories of New Zealand*. Oxford University Press: South Melbourne. Pp 261-274.

⁵ Costanza R, Hart M, Posner S & Talberth J (2009). “Misuses of the GDP and the Need for New Measures of Progress” in: *The Pardee Papers*. 4. pp 1- 36.

15. Renewable electricity generation relies upon utilisation of a finite ecosystem. Therefore unquestioned assumptions on continuing electricity growth in the renewable electricity sector will inevitably compromise our natural environment. All renewable electricity is not ‘created equal’ and some technologies are much more harmful on ecosystems than others. One example is a hydro electricity dam compared with solar hot water installation.
16. Renewable energy practices should, therefore, ensure that efficiency and development of these technologies is contexted appropriately within the RMA. Renewable electricity generation is a laudable target - indeed, an absolute requirement to prevent the losses to the planet’s ecosystems from climate change. However, fixing one wrong should not result in creating another as a consequence. Climate change effects (principally addressed by renewable energy sources) and biodiversity losses can and should be responded to in a correspondingly coordinated fashion. They are not, as some have argued, an opportunity for trade-off, off-setting, or ‘net environmental gain’.
17. In the context of this proposed NPS, there is no justification to elevate the status of renewable energy to such an extent that it would override the critical factors affecting current Part 2 matters of national importance. There is, however, value in recognising the capacity for an NPS to give guidance on appropriateness of technology effects (including reversibility) and the extent to which it should rest against other Part 2 matters.
18. Coupling energy demand and growth leads to an assumption that for our well-being to be addressed, there needs to be a corresponding increase in growth of renewable electricity. In the briefing to the incoming Minister of Energy, measures of efficiency were outlined.

The Commission has completed the first ‘bottom up’ analysis of the potential opportunities and priorities for electricity efficiency in New Zealand. This analysis indicates that 6400 GWh per year of savings can

be achieved at less cost than supply side alternatives and that the Commission could achieve 840 GWh of these savings by 2016 based on current funding levels (840 GWh equates to the annual usage of a city the size of Dunedin)⁶.

19. It is apparent then that there is much we can do about energy efficiency, grasping the opportunity offered by a current economic recession to restructure our markets, and provide a more integrated approach. Continued growth in electricity generation is not going to provide for the health and wellbeing of our nation if it continues to involve options that are damaging to our environment. Incessant growth is the nature of capital and profit-making organisations, yet it runs into the fundamental problem of limits. Hence the development of an NPS that does not recognise these limits will place an undue bias in favour of growth of renewable electricity generation.
20. Renewable electricity generation projects are creating even greater potential conflicts with efforts to protect our country from further biodiversity and intact ecosystem losses.
21. Sinclair, Knight & Mertz have completed renewable energy studies for regions throughout New Zealand. Taken from the Tasman area report is the following example of how hydro is conflicting with efforts to protect biodiversity and high value conservation sites.

In summary:

- *One large scale project of around 110MW and around 10 to 12 medium scale hydropower schemes totalling around 370MW were identified in Tasman District, totalling around 480MW. However from the overview of the maps, it appears except for two schemes*

⁶ Electricity Commission (2008). *Briefing to the Incoming Minister: Hon Gerry Brownlee*. 20 November 2008.

totalling around 45 MW, all other schemes are within or near the Department of Conservation land or Native Forests.

- *Approximately 8 ‘mini’ or ‘small’ scale projects are believed to be possible in the region with a combined capacity of approximately 35 MW. Again almost all of these schemes are within or near the Department of Conservation land.*

22. The attitude of some is to attempt to reduce the status and need to protect conservation land. An example is a paper prepared by Mark Christensen, Partner with Anderson Lloyd Lawyers, legal firm for such companies as Meridian Energy Ltd (a state owned enterprise). This paper advocates for conservation land to be more flexible and *“balance the need to respond to climate change with the need to manage local areas for conservation purposes.”*⁷

23. The temptation to reduce the protection of our public conservation lands is seductive in the face of unquestioned assumptions of growth and inflexible mentalities on the nature of providing electricity in a sustainable manner for our society.

24. An example of how hydro electricity affects ecosystems is highlighted in the instance of the Mokihinui River, West Coast, South Island.

25. A large dam is anything over 15 metres in height. The proposed Mokihinui dam is 85 metres tall.

26. The effects of large dams are well documented internationally and include⁸:

- Flooding and fragmenting ecosystems

⁷ Christensen, M (2008). “The Conservation Estate and Climate Change: A Lost Opportunity?” in: *LexisNexis Professional Development – Environmental and Climate Change Legal Symposium – April 2008*.

⁸ Goldsmith E & Hildyard M (1984). *The Social and Environmental Effects of Large Dams*. Wadebridge: Cornwall. Also: Rosenberg, DM *et al* (1997). “Large Scale Impacts of Hydroelectric Development” in: *Environmental Reviews*. 5. pp 27 – 54.

- Drowning vegetation causing anoxic water and releasing greenhouse gases
- Blocking passage of migratory species
- Highly unnatural downstream water flows (hydro-peaking)
- Blocking sediment transport causing coastal erosion
- Decreasing fish populations
- Known to trigger earthquakes

27. With such significant environmental damage, and the finiteness of the resource, i.e. water diverted for hydro resource, one needs to question whether or not a purported renewable electricity is indeed renewable and sustainable.

28. Renewable generation must:

- Retain intactness of ecosystem
- Have capacity for the infrastructure to be removed and ecosystem completely restored.

29. This leads to obvious questioning about the relevance of some currently known renewable technologies to be advocated for under this proposed NPS. Hence the reversibility of effects policy is an opportunity for this to occur.

30. Several parties have asked for this policy to be removed and argue that the effects on the environment are considered under other Part 2 matters. However, it is our contention that the information provided in an AEE is for a different purpose. In our submission we have said simply that the environmental effects of some projects are more permanent, long-lasting, and thus unable to be reversed than others. There must be some weighting placed on this aspect of reversibility if there is to be any weighting on the placement of renewable electricity generation within an NPS.

31. This policy actually provides the opportunity to encourage a shift in technologies to those that are less damaging to the environment, able to be reversed, and are truly sustainable within the finite nature of our ecosystems.

32. One could also question whether or not any of the more damaging technologies are necessary given opportunities for efficiencies, improving technologies – and the availability of other methods of generation.

33. Electricity Commission figures show that generation proposals already exceed that what is needed at even high demand curves.

“Over the next seven to ten years, Electricity Commission analysis showed the number of new generation projects was about four times the expected growth in demand. Over the coming four years, more than 1300 megawatts of new generation projects are planned, totalling up to \$4b of capital investment.” (Marlborough Express, 21/7/08)

34. A final issue I wish to turn to before other matters is the argument apparent throughout the section 32 report, that the current provisions within the RMA are somehow debilitating to potentially important renewable electricity generation schemes. The legislation provides an important hurdle for development to have to jump before it can proceed. If it fails to do this then the development cannot be considered sustainable. I have already highlighted comments made within the legal profession of how the environment is continuing to downgrade, at the same time as electricity projects continue to increase. The very barriers current within the RMA are important issues that must be recognised. They will serve to ‘weed out’ the bad projects from the ‘good’; and the projects that have sustained strong analysis on the effects on the environment (which in itself may be nationally significant).

Sustainable Management of Natural and Physical Resources

35. Part 2 of the RMA outlines the purpose and principles of the Act.
36. Section 5 refers to the overlying purpose. Section 6 identifies matters of national importance of which the *key* issues of concern to Forest and Bird given our constitutional purpose are sections 6(a), (b) and (c).
37. The potential underlying issue within an NPS is how to achieve sustainable management of our electricity supplies whilst upholding the purpose and principles of the RMA. An NPS should not derogate from the responsibilities provided under that purpose and principles.
38. In the absence of an NPS on biodiversity any potential of an NPS to displace the appropriate consideration to be given to these matters of national importance (and other principles) must be avoided. The end result should not contribute to the continuation of biodiversity loss, the destruction of natural features, and the loss of natural character (as defined in section 6(a)) in New Zealand.
39. A major tension with electricity generators is the hurdles that need to be overcome to obtain and exercise consent. This leads to the matters to be provided for in Part 2 of the Act to potentially frustrate consent. An example of this is outlined on page 15 of the proposed Statement.
- “This observation reflects concern amongst the major generators that resource consents show a trend to be granted subject to conditions of consent that are too strict and ‘protectionist’, so as to undermine the financial viability of consented projects.”*
40. The RMA provides a critical feature to ensure that environmental effects are avoided, remedied or mitigated. This is the key assurance by which any negative effects a potential scheme has on the environment are balanced out. The cost of

conditions of consent are the direct opportunity to avoid, remedy or mitigate. Anything that does not achieve this is clearly not sustainable development because it will degrade the environment.

41. An NPS must not reduce the capacity of the RMA to avoid, remedy or mitigate. Policy 2 has the potential to undermine this despite the section 32 evaluation. How can it not?

Although the nature of effects may not be changed by this policy, it may change how decision-makers view the acceptability of certain effects that are concerned with one or more of the matters listed in the Policy. In this regard, Policy 2 seeks to tip the balance in favour of renewable electricity projects that, for reasons deriving from practical constraints, might otherwise fail to gain a commercially viable resource consent. (p37)

42. Matters of whether or not a scheme is financially viable is not the core of what the NPS should be about. The NPS should be about promoting investment in sustainably sound renewable energy alternatives, and not to move the shift away from seeking appropriate types of technology if market indicators provide that in a appropriate 'playing field', and increasing the likelihood of uptake in efficiency measures.

43. Under the benefits of Policy 2 it states that it will allow decision-makers to "recognise that in some instances the emphasis will need to be on mitigating rather than avoiding effects ..." (p38). It is our submission that the opportunity to mitigate already exists within the current framework. Case law has already established that there is no hierarchy in terms of determining avoidance, remediation, or mitigation.

44. Finally, under costs of Policy 2, the writers note:

It is conceivable that some applicants may seek to use Policy 2 to argue that it is not practical to avoid, remedy or mitigate significant adverse

effects. In this sense Policy 2 risks encouraging economically expedient site selection and project design. Some council officers spoken to as part of this evaluation thought Policy 2 would create a very favourable regulatory framework for renewable electricity generation projects.

45. The reports attempts to deal with this conceivable outcome provide no assurance. The council officers 'on the ground' would be well aware of how this would proceed, having been involved in consenting processes on a routine basis. From the perspective of Forest & Bird, we have already seen this trying to be argued within hearings on a regular basis. The core question comes back to an assurance that it must be sustainable – and to do that requires avoiding, remedying or mitigating.
46. The Objective is supported within the constraints of limits to growth as we highlighted earlier. A suggestion is that the policy actually refers to the finite nature of the ecosystems upon which renewable is reliant.
47. Comments on Policy 1. In our submissions we highlighted how inappropriate it is to have a list that is non-exclusive and therefore, almost limitless. The key factors should be identified and included. Secondly, the benefits of something at a 'national level' should not outweigh nationally important biodiversity issues that occur at a local level, e.g. rareness in an ecological district for example. It is therefore debatable if all renewable electricity generation is fundamentally of national significance, if other issues of national significance are given equal weight.
48. Policies 2 & 3. These have been adequately covered in earlier comments.
49. Policies 4 & 5. We have concerns that the integration of our electricity supply should not become entirely focussed at a regional level. We are a small country, and we do need to provide for electricity generation that is transported around the

country. This would ensure that areas where the only options for renewable electricity generation would seriously impact upon nationally important matters are not setting a 'lower barrier' for acceptance, than in other more modified and potentially receptive sites. What is more important here is a thrust for national identification and integration, supporting local identification of sites.

Energy Generation & Other Options

50. Over the many years Forest & Bird has been involved in making submissions on electricity generation projects, we are constantly asked the question, "What will we do for electricity then?"

51. Providing answers for the electricity sector is not core business for Forest and Bird, but given that we are dealing with this on a regular basis, we have come to the conclusion that much more integrated work needs to be done in terms of determining electricity generation – and conservation – options.

52. Firstly, the way projects are initiated essentially turns 'thoughtful' planning on its head. Energy is being provided for the public and industry to enjoy consumption of various kinds. Yet, when we push our energy projects into highly natural areas, we shift the burden onto an already declining biodiversity.

53. These highly natural environments do not have the flexibility to shift, cope, adapt, respond, provide technical solutions, etc. to the pressures placed on it by humans. In contrast, we as humans, have a much better capacity to respond.

54. Hence we have made suggestions in three other areas where renewable electricity generation could play a role.

55. Greater emphasis could be made on more effective consultation and planning management. Refer recent case study of Matakītaki River, compared with Mokihinui and Wairau proposals.

56. We believe that much could be improved in the way of defining best practice in terms of consultation, biodiversity and natural features, community involvement, siting and local benefits.
57. An integrated electricity market needs a strong push from a governmental level. Example of the Matakītaki River where they require to develop a water storage scheme so they can operate a solar scheme and have internal capacity to deal with 'peak loads/requirements'.
58. In conclusion then, we have a responsibility to ensure that whatever development is undertaken under the framework of the RMA, and any NPS that flows from it, that it sustains the very things to which the purpose of the Act directs are to be considered. Frustrations to infrastructure may need to be real as important indicators to the 'marketplace' that efforts need to shift.

D Martin
Royal Forest and Bird Protection Society Inc
Regional Field Officer
11 May 2009