



7 November 2008

The Chair  
Board of Enquiry  
National Policy Statement on Renewable Electricity  
c/o Ministry for the Environment  
Wellington

Dear Sir

**FISH & GAME NEW ZEALAND SUBMISSION ON THE PROPOSED NPS ON  
RENEWABLE ELECTRICITY**

This submission is presented on behalf of the New Zealand Fish and Game Council (NZFGC), being a public entity established pursuant to section 26B(1) of the Conservation Act 1987 to:

*“represent nationally the interests of anglers and hunters”.*

The Council also has the role to:

*“provide co-ordination of the management, enhancement and maintenance of sports fish (trout and salmon) and game (game birds)”.*

which is the primary function of the 12 regional Fish and Game Councils that cover the country (except for the Taupo trout fishery, managed as a Fish and Game Council by the Department of Conservation).

This submission has a general introduction on the topic, and then makes specific submissions on the various parts of the proposed National Policy Statement. It seeks amendment to, or deletion of, particular parts of the proposed NPS as it would not, in its current form, promote the sustainable management of natural and physical resources.

Fish and Game New Zealand wishes to be heard in support of this submission.

Yours faithfully

A handwritten signature in black ink that reads "Bryce Johnson".

Bryce Johnson  
Chief Executive

## FISH AND GAME NEW ZEALAND NPS ON ELECTRICITY SUBMISSION

### INTRODUCTION

1. Energy is essential to all life and in developed, high energy dependent, human societies this is significantly supplemented by artificial generation to energize modern domestic lifestyles and commercial industries. Historically, energy demand has increased as a consequence of human population growth and industrialization.
2. This proposed NPS appears to promote particular forms of energy development, potentially with less consideration of actual or potential effects. This would promote particular commercial developments and uses of public natural resources such as coastal and water resources over existing public non-consumptive uses of those resources. Until now, the RMA has not promoted any particular commercial use of resources over any other commercial resource. This NPS in its current form sets an inappropriate precedent and therefore should be withdrawn.

#### **The ‘finite renewable’**

3. These supplemental energy sources can be divided into two broad categories - those that are considered naturally renewable (solar, wind, geothermal, biomass, tidal, wave, and ocean currents resources), and those that are finite and hence susceptible to depletion (fossil fuels). This distinction is really about whether or not they are associated with emission of carbon.
4. Historically in New Zealand this notion of ‘renewable’ energy has also included energy derived from hydro electric generation, on the basis that river flow is perpetual and non-carbon emitting. While this geographic fact is not disputed there equally exists recognition that the actual number of rivers from which hydro energy may be generated is finite. Rivers therefore are really a unique category in terms of the energy generation debate and, depending on the criteria used, fall into both renewable and non-renewable categories. As such they can be accurately described by the term ‘finite renewable’, being a term which embodies both elements of their current public perception. The rivers themselves are not renewable, and all of the country’s four largest catchments (Clutha, Waikato, Waitaki and Waiiau) have been substantially modified already by hydroelectric power development. Rivers are not the only natural resource which is finite and which may be affected by ‘renewable’ energy projects, but are perhaps the most obviously already affected and iconic feature under threat from these proposals. Fish and Game submits this term should be recognised in an appropriate place in the NPS, if it is to be retained, and specifically should be included in the interpretation section.

#### **The Kiwi brand**

5. New Zealand’s rivers, which comprise a central feature of the country’s geographic form and ‘100% Pure’ brand identity, have been the subject of regular public debate and extensive litigation for many years. This debate has progressed to the point where protection of the remaining stock of free flowing rivers is now a matter of high public interest and expectation. Thus while those rivers already dammed for energy generation are recognised as sources of ‘renewable’ energy (based on the perpetual nature of their flow) those rivers that remain free flowing are increasingly recognised within the non-renewable category (because of their finite number).
6. This unique distinction about rivers needs to be openly recognised in any National Policy Statement for Renewable Electricity Generation.

### **The ‘where to after the last river’ challenge**

7. A further high level matter that should be factored into any NPS on energy is around the testing question of “where to after, or as one approaches, the last river?” Even if it was agreed that all remaining rivers with hydro generation potential were to be developed New Zealand would ultimately be faced with the need to find further alternative energy sources if it was to continue to follow a demand driven growth path. And once this question becomes a matter of statutory contemplation and conclusion it invites the supplementary question “well, why not go there now and retain the remaining stock of free flowing rivers?”
8. To put this in perspective a simple table is attached which records the how long before the remaining stock of river-based hydro generation potential is exhausted given current and estimated future energy demand. With a total of 2495MW, and an annual anticipated growth demand in new capacity of 175MWpa, this equates to a mere 14 years and 3 months of remaining hydro potential before all potential river-based supply is exhausted.
9. Were this to happen New Zealand would have sacrificed a key component of its natural environment based international brand.

### **The Major Issue**

10. ‘Sustainable growth’, when dependent on a finite resource base of rivers, is a contradiction in terms. While improved energy use efficiency and incentives for energy conservation might reduce the level of use per unit of output these do not reduce consumption, but rather only release energy for additional use elsewhere and/or delay the rate of depletion.
11. Growth in human population and expansion of industry/economy, increases demand. Such growth and expansion is not sustainable, by definition, when the energy source is finite.
12. To date New Zealand has not openly debated this fundamental issue and the three year election cycle has meant that our politicians are desperately reluctant to even contemplate it. New Zealand needs a ‘Commission for the Future’ to urgently begin long term planning for its future in relation to resource depletion risk management.
13. Many of the Fish and Game concerns about this NPS, in its current form, arise from the relationship between the stated energy policy of the current Government, released in October 2007, and a major statute which can influence or be influenced by that policy. If, however, the statute itself is perceived as an impediment to implementation of Government policy, the proper option by Government is to seek to amend the legislation. Any National Policy Statement introduced under the RMA must fulfil the requirements and objectives of that Act to the extent possible. It cannot be used as a way of circumventing procedures or requirements of that Act.
14. The purpose of the RMA is to promote sustainable management of natural and physical resources. Thus this National Policy Statement must address how this objective will be met in the context of what it has described as ‘renewable’ electricity generation. It is notable that the only proposed NPS which considers energy concerns itself only with renewable electricity generation. As it has been so restricted, it makes difficult the integrated management of natural and physical resources as required in the Act, as other forms of energy generation, whether renewable or not, or avoiding the need for energy development through demand management, are not directly considered.

### **Section 32 Analysis**

15. The preamble states unequivocally that NZ faces two energy challenges as it meets growing energy demand. The question of demand-side management is therefore avoided. The Section 32 analysis of this issue should also consider demand-side management and does not appear to, beyond the rather cursory statement as follows:

*“Although in some areas efficiency gains could be made and electricity could be used more wisely, an increase in supply will be necessary to support improvement in the economic, social and cultural wellbeing of New Zealanders.”* [p. 31]
16. If the need for energy can be avoided, the effects of creating new generation do not need to be remedied or mitigated.
17. In similar fashion, the NPS and its Section 32 report promotes the ‘nationally (and globally) significant’ benefits of any ‘renewable’ electricity development whatever its scale against the ‘locally significant’ environmental effects of such developments. This is logically untenable. Not all developments are nationally significant, while some natural resources which may be affected by such developments will be nationally or even internationally significant. The relative assessment and balancing judgement on the merits of an application made by decision-makers at a local level is essential to the resource management process. A national policy statement cannot and should not overlook this. The way in which the Crown responsibilities have been devolved to different Government Departments and local authorities means that those agencies must undertake and/or promote policies relevant to their functions. In the case of energy developments, the MED or EECA are the authorities with the expertise and responsibility to promote government policy for energy, while other agencies may have other statutory and/or government policy responsibilities in respect of the same issue. The purpose of the present government structures is to ensure that a decision-maker has access to all relevant information in an open and transparent process.
18. The Section 32 Analysis does not consider all relevant matters of the Act as required. Instead, only the following matters were considered as part of the evaluation (pages 28 & 29 of the Section 32 analysis):
19. *“The evaluation includes consideration of key elements related to the purpose of the RMA.*
20. The Section 32 analysis appears to be incomplete. Table 6, for example, in the Section 32 analysis, mentions only Section 5, then sections 7 (i) and (j), in considering the appropriateness of the Objective. However section 7 (h), dealing with the habitat of trout and salmon, is an obvious statutory element potentially affected by hydro development
21. Such a limited evaluation is clearly inadequate as it does not consider other Part II matters such as section 7(h). This must seriously question the completeness of the Section 32 analysis which appears only to consider matters which are favourable towards development of this policy. An appropriate response would be to withdraw this NPS until a complete Section 32 analysis had been undertaken.

### **SPECIFIC SUBMISSIONS ON THE PROPOSED NPS**

#### **Preamble**

22. One major problem with ‘renewable’ energy policy in NZ is evident from the preamble. Government policy is that 90% of NZ’s energy is to be from ‘renewable’ sources by 2025, but this is based on energy supplied in an average hydrological year. This already indicates

that NZ has a clear weighting towards hydroelectric power as the most substantial proportion of installed capacity, at something more than 60% of electricity generation. Our security of supply is threatened now; if additional hydroelectric power development is developed, this uncertainty of supply in a drought year, may go from inconvenient to precarious. We must learn to avoid putting all our eggs in this one basket. We will also continue to rely upon an effective national grid to move energy between where it can be generated most efficiently and where it is to be used.

23. This part of the preamble does not consider some of the other relevant aspects of Part II of the Act, including from Section 6 the maintenance and enhancement of public access (Section 6d), and from Section 7 the following clauses are all relevant:
  - (a) Kaitiakitanga:
    - (aa) The ethic of stewardship:
  - (b) The efficient use and development of natural and physical resources:
    - (ba) the efficiency of the end use of energy:
  - (c) The maintenance and enhancement of amenity values:
  - (d) Intrinsic values of ecosystems:
  - (f) Maintenance and enhancement of the quality of the environment:
  - (g) Any finite characteristics of natural and physical resources:
  - (h) The protection of the habitat of trout and salmon:

24. Reference to all potentially conflicting sections must be included and the NPS must resolve how a decisionmaker would address such conflicts. Part II of the Act is a higher level instrument than an NPS. All relevant matters therefore need to be included in the reference above.

#### **Title**

25. This national policy statement may be cited as the National Policy Statement for Renewable Electricity Generation.
26. At a most fundamental level, the proposed NPS interprets 'renewable energy generation' as being electricity generated from solar, wind, hydro, geothermal, biomass, tidal, wave, or ocean currents. What this appears to mean is that electricity generated from non net carbon-emitting sources is 'renewable', as opposed to those from carbon-emitting sources. If it is about reducing carbon emissions, the NPS should state this rather than imply that all non carbon-emitting electricity generation is renewable, which it may or may not be, as discussed above in this submission.
27. Other sources of carbon emissions, such as agriculture, or forms of energy other than electricity are not considered, but should be, if the primary purpose of this NPS is to reduce carbon emissions. The list of so-called 'renewable' forms of electricity generation each has a variety of actual or potential effects, some of which have non-renewable consequences. Demand reduction is not considered as part of this NPS. The effects of potentially increasing New Zealand's reliance on hydroelectric power generation through this policy during potentially more uncertain climate variability appears to have been overlooked. These are major failings which are collectively sufficient to cast doubt on the appropriateness of this NPS in its current form.

Submission

28. Fish and Game submits that this NPS, in its current format, fails to address a number of relevant matters such as Part II RMA considerations, which calls its appropriateness or potential effectiveness into question. It should be withdrawn or rejected until those matters have been appropriately addressed in a comprehensive fashion. It should not uncritically use terms such as ‘renewable’ loosely, when their effect on finite resources is anything but renewable.

**Matter of national significance**

29. The matter of national significance to which this national policy statement applies is the need to develop, upgrade, maintain and operate renewable electricity generation activities throughout New Zealand.

Submission

30. As discussed above, development, upgrading, maintenance and operation of particular forms of electricity generation in particular places will have varying degrees of significance and/or effects in those different places. Not all ‘renewable’, or even non carbon-emitting, generation of electricity can be considered nationally significant. It would be as untenable as to suggest that all salmonid habitats, the protection of which is a matter to which consent authorities must have particular regard under Section 7(h) of the Act, are nationally significant.

31. The matter of national significance should be re-cast as:

32. *‘the need to reduce carbon emissions from electricity generation and to promote, where adverse effects can be avoided, remedied or mitigated, energy demand reduction or non carbon-emitting electricity generation over other forms of energy generation.’*

**Objective**

Submission

33. The proposed National Policy Statement for Renewable Electricity Generation sets out an objective that 90% of New Zealand’s electricity will be generated from renewable sources by 2025 (based on delivered electricity in an average hydrological year).

34. It is notable that in promoting the national significance of 90% renewable electricity generation by 2025 the proposed objective does not address the environmental costs associated with renewable electricity generation. For example:

The natural resources from which “renewable” electricity is generated can coincide with areas of significant natural character, significant amenity values, outstanding natural features / landscapes and areas of significant vegetation, flora and fauna which provide habitat for wildlife. Such natural resources are a finite resource and their depletion could not be considered ‘renewable’.

35. Renewable electricity generation projects such as hydro can introduce potentially significant adverse environmental effects.

36. The objective should be deleted or amended as follows:

37. *‘To recognise the national significance of electricity generation from non carbon-emitting sources, promoting those energy generation sources which are more reversible in their*

*effects, while avoiding, remedying or mitigating the adverse environmental effects associated with moving the electricity generation and transmission system on to a basis that is 90 percent renewable by 2025 (based on delivered electricity in an average hydrological year). ‘*

## **Recognising the national significance of the benefits of renewable electricity generation activities**

### **Policy 1**

#### Submission

38. The policy should be amended as follows, or deleted:

39. *‘Renewable electricity generation activities can be of national significance if they promote sustainable management. Decision-makers must have particular regard to the national, regional and local benefits and costs relevant to renewable electricity generation activities. These benefits may include, but are not limited to:*

- i. maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions*
- ii. maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation.*

40. *Costs may include, but are not limited to:*

*effectively irreversible adverse effects on the environment or on matters outlined in Part II of the Act.’*

## **Acknowledging the practical constraints associated with the development, upgrading, maintenance and operation of new and existing renewable electricity generation activities**

### **Policy 2**

#### Submission

41. Policy 2 appears to exist to give undue weight to matters which would enable a consent authority to overlook actual or potential adverse effects of a proposal. Elevating the benefits of renewable electricity generation activities to national importance could tip the balance too far in favour of renewable electricity generation projects irrespective of the associated environmental effects. The proposed policy statement does not expressly recognise that there will be cases where the benefits of a renewable electricity generation project may not be sufficient to offset the associated environmental effects. An applicant would also be able to argue, under this policy, that avoiding, remedying or mitigating adverse effects would be impractical; the consequences of which would be unacceptable and would not promote sustainable management in terms of the Act.

42. In its present form, Policy 2 cannot be amended to remove its deficiencies. Fish and Game submits that it should therefore be deleted.

## **Having regard to the relative reversibility of adverse effects associated with particular generation types**

### **Policy 3**

#### Submission

43. Policy 3 provides that when considering proposals to develop new renewable electricity generation activities, decision makers must have regard to the relative degree of reversibility of the adverse environmental effects associated with the proposed generation technologies.
44. It is arguable that policy 3 supports development which minimises the potential for decisions to limit future options for the use and development of natural and physical resources and recognises that some renewable electricity generation technologies may be transitional. Some statutory recognition that different types of electricity generation have different degrees of reversibility and that the more readily reversible should be favoured over the less reversible. This principle should be recognised in the NPS. However, the concept of reversibility is open to interpretation by both applicants and opponents in circumstances where it is not defined. Fish and Game supports the inclusion of this policy, provided it establishes a clear priority in favour of more reversible projects.
45. This policy should be amended as follows:
46. *“When considering proposals to develop new electricity generation activities of the type covered by this National Policy Statement, to avoid those which have or are likely to have significant adverse effects which cannot be reversed, or which can only be reversed at high cost and/or over long periods of time decision makers must have particular regard etc”*

## **Enabling identification of renewable electricity generation possibilities**

### **Policy 4**

#### Submission

47. This policy appears to be intended to facilitate investigations by largely private energy companies. Fish and Game submits it should be amended as follows:
48. *‘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 consider activities associated with:*
- i. the identification and assessment by generators of potential sites and energy sources for renewable electricity generation, which do not conflict with sites with known national or regionally significant resources*
  - ii. research-scale investigation into emerging renewable electricity generation technologies and method.’*

## **Supporting small and community-scale renewable electricity generation**

### **Policy 5**

#### Submission

49. A minor amendment to this policy is recommended as follows:

50. *“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 consider activities associated with the development and operation of small and community-scale distributed renewable electricity generation.”*

## **Interpretation**

### Submission

51. Only those definitions on which Fish and Game wishes to comment have been included in this summary:

- i. In this national policy statement, unless the context otherwise requires:
- ii. A new definition could be inserted as follows:

*“**Finite-renewable electricity generation**” means, in the case of rivers, hydro generation of electricity from the finite stock of rivers and would be equivalent for other forms of generation.*
- iii. The following definition for renewable electricity generation should be deleted, as it is both incomplete and inaccurate, in that some of these forms of generation have effects which are not renewable. As referred to above, the purpose of the whole NPS should be reviewed in that it appears to promote use of non- or low-carbon emitting electricity generation, but loosely describes these as ‘renewable’, when the adverse effects of their use and implementation may not be renewable. A possibly acceptable alternative may be to replace, throughout the NPS, the phrase ‘renewable electricity generation’ with ‘low carbon-emitting electricity generation’. This would not suggest any sustainability preference which the ‘renewable’ label may inaccurately imply.
- iv. *“**Low carbon-emitting electricity generation activities**” means the construction, operation and maintenance of structures associated with the generation of renewable electricity. This includes small and community-scale distributed renewable generation activities and the system of electricity conveyance required to convey electricity to the local electricity distribution network and/or the national grid.*
- v. *“**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.*

## **Summary**

52. Fish and Game New Zealand represents nationally the interests of anglers and hunters in New Zealand. The proposed NPS for Renewable Electricity Generation in its present form could have the effect of favouring energy projects which could pose significant risk to natural and physical resources and the promotion of sustainable management. Fish and Game submits, as a minimum, some amendments which should be made to the NPS in its present form, or that it should be withdrawn or deleted.
  
53. Fish and Game wishes to be heard in relation to this submission, should the opportunity be made available.

Bryce Johnson  
Chief Executive  
New Zealand Fish and Game Council