
STATEMENT OF ANDREW CLIFFORD SCHOLLUM

Statement of qualifications and experience

1. My full name is Andrew Clifford Schollum. I am employed in the Ministry for the Environment as a Senior Adviser in the RMA Policy and Functions team within the Local Government Group, a position I have held since April 2008.
2. In this role I was responsible for project managing the development of the Proposed National Policy Statement for Renewable Electricity Generation (the proposed NPS), the evaluation of alternatives, costs and benefits required by section 32 of the Resource Management Act 1991 (RMA), and the regulatory impact statement associated with the proposed NPS.
3. Prior to joining the Ministry for the Environment I held the roles of: Manager Consents – Projects Development at Mighty River Power; Policy Planner at the Auckland Regional Council; and Environmental Consultant at Mitchell Partnerships.
4. I hold a Masters degree with Distinction in Environmental Studies from Victoria University of Wellington and a Bachelor of Arts degree (Psychology) from the University of Auckland.

Scope of statement

5. This statement provides answers to the following questions directed to the Ministry for the Environment by the Board of Inquiry for the proposed NPS:
 - (A) “What is the current status of the New Zealand Emissions Trading Scheme?”
 - (B) What is the status of the inquiry into the Draft New Zealand Coastal Policy Statement?
 - (C) How do the provisions of that draft policy affect developments in the coastal environment, eg, windfarms?

- (D) Can the New Zealand wind map showing the ranking and suitability of areas for wind farms be provided?
- (E) Are there any RMA instruments that deal with how the effects of bio-fuel production can be managed?
- (F) At page 20 of the section 32 analysis, it is stated that, “until recently local authorities have not, in general, developed specific policies to address renewable electricity generation.” Are there recent examples of where they have done this, and if so what are those examples?
- (G) What evidence did the Crown give at the Project Hayes Environment Court hearing in respect of the benefits of renewable electricity generation and any assessment criteria it considered the court should apply?
- (H) In what sense is the lack of amendments to plans and/or policy statements to explicitly recognise the benefits of renewable electricity a “barrier” to the timely and efficient granting of consents? (refer p.14 of the report).
- (I) It is stated (p.15) that “the philosophy behind the RMA leads it to remain largely silent on how to appropriately balance national and local benefits and effects...” What is the basis of this comment?
- (J) Are the Government’s recently proposed amendments to the RMA likely to have an impact on the proposed NPS (on renewable electricity)? If so, how?”

6. In addition, the Board of Inquiry directed the following question to the Ministry of Economic Development, which is more appropriately directed to the Ministry for the Environment and is, therefore, addressed in paragraph 43 and Appendix 5 of this statement:

- (K) “At Box 5.1: Global Abatement Cost Curve. (p28) Has any attempt been made to undertake a cost curve of the nature shown in Box 5.1 for New Zealand?”

A. “What is the current status of the New Zealand Emissions Trading Scheme?”

7. The NZ emissions trading scheme (NZETS) was enacted on 26 September 2008 and work is progressing on its implementation, including regulations on emissions accounting for the stationary energy and transport fuels sectors. Work is also underway to explore harmonizing the NZETS with the outlined Australian Carbon Pollution Reduction Scheme.
8. A special Select Committee is presently hearing submissions on a broad review of New Zealand's approaches to climate change, including the alternatives to an emissions trading scheme. The Committee is expected to report back to Parliament in June 2009.

B. “What is the status of the inquiry into the Draft New Zealand Coastal Policy Statement?”

9. The Board of Inquiry for the Proposed New Zealand Coastal Policy Statement (PNZCPS) concluded hearings in mid to late December 2008 – later than initially expected. The Minister of Conservation granted an extension to the reporting date to allow the Board to submit its report to the Minister by 31 March 2009. The Board of Inquiry's report and recommendations to the Minister of Conservation are not yet complete and it is likely that a further extension will be granted to push the reporting date back to May 2009.

C. “How do the provisions of that draft policy affect developments in the coastal environment, eg, windfarms?”

Legal effect

10. The date at which the PNZCPS has legal effect derives from the gazette notice, which may also specify an additional period following gazettal before the provisions ‘kick in’. Despite this, when considering an application for a resource consent and any submissions received, the consent authority must – under section 104(1)(c) of the RMA – “have regard to ... any other matter the consent authority considers relevant and reasonably necessary to determine the application”. In some cases the

consent authority may consider that consideration of the PNZCPS is relevant and reasonably necessary to determine the application.

11. If the consent authority chooses to have regard to the PNZCPS under section 104(1)(c), the authority would afford the relevant provisions of the PNZCPS such weight as it sees fit in the circumstances; a decision that will be determined by the facts and circumstances at play in a particular case.
12. Once the PNZCPS is approved and issued by notice in the Gazette it becomes the 'New Zealand Coastal Policy Statement' (NZCPS) and local authorities will be required to review and, where necessary, amend their plans and policy statements to ensure that they give effect to its provisions¹. Decision-makers will also be required under section 104(1)(b)(ii) to have regard to any relevant provisions of the NZCPS when considering an application for resource consent and any submissions received and under section 171(1)(a)(ii) when considering a notice of requirement for a designation.
13. The effect of the PNZCPS on the development of renewable generation technologies and associated infrastructure in the coastal environment (including wind, offshore wind and the various marine technologies) will not, therefore, become clear until:
 - The Board of Inquiry for the PNZCPS has submitted its final report and recommendations to the Minister of Conservation; and
 - The Minister of Conservation considers the report and recommendations of the Board of Inquiry and makes any changes to the PNZCPS that he thinks fit; and
 - The Governor-General has approved the PNZCPS on the recommendation of the Minister of Conservation; and

¹ Section 55(2) requires local authorities to amend plans and policy statements (including proposed changes and variations) to give effect to a provision in a national policy statement that affect the document. The RMA also includes general requirements for plans and policy statements to give effect to national policy statements (see section 62(3) for regional policy statements, section 67(3)(a-b) for regional plans and section 75(3)(a-b) for district plans).

- Local authorities have given effect to the NZCPS by reviewing and amending their plans and policy statements where necessary; and
- Decision-makers have interpreted and applied the provisions of the NZCPS in the context of actual applications to develop windfarms, other renewable generation technologies and associated infrastructure in specific locations within the coastal environment.

Key provisions

14. Depending on the effects – positive and negative – of a particular proposal, it is possible that many of the 10 objectives and 57 policies of the PNZCPS would have a bearing on the development of renewable generation technologies and associated infrastructure in the coastal environment.
15. Notwithstanding the above, it would appear that Objectives 1 and 10, and policy 18 of the PNZCPS are directly relevant to this form of development in the coastal environment. These provisions are repeated below (in italics) along with the related text from the evaluation of alternatives, costs and benefits of these proposed provisions undertaken by the Department of Conservation:

15.1 Objective 1:

“People and communities are able to provide for their social, economic, and cultural wellbeing through the use, development, and protection of natural and physical resources in the coastal environment.”

It is considered that this objective assists in ensuring that sustainable management is promoted by the Proposed NZCPS. It is considered that these matters would not be sufficiently addressed by retention of the 1994 NZCPS principles or by the deletion of social, economic and cultural wellbeing from the Proposed NZCPS. Therefore, in comparison to these alternatives, and having regard to the above matters, Objective 1 is considered the most appropriate way to achieve the purpose of the RMA.”

15.2 Objective 10:

“Management of the coastal environment recognises the Crown’s interests as an owner of land in the coastal marine area, and New Zealand’s international obligations:

To reflect the interests of the Crown, as an owner of land in the coastal marine area on behalf of the people of New Zealand, it is considered that the proposed NZCPS should contain a separate objective specific to management of that land. To promote sustainable management of this public land in the coastal environment, the objective should:

- Specify that the management of the coastal environment recognises the interests of the Crown as the owner of land in the coastal marine area;
- Provide for the NZCPS to contain further policies addressing coastal occupation changes and reclamation vesting charges;
- Provide for the recognition of New Zealand’s international obligations.”

15.3 Policy 18 – *“Crown interest in particular activities on land of the Crown in the coastal marine area:*

Policy statements and regional coastal plans shall recognise the Crown’s interest in making land of the Crown in the coastal marine area available for:

- (a) *infrastructure of national importance;*
- (b) *renewable energy generation;*

where such use and development would meet the purpose of the Act.

In order to achieve Objective 1 and enable people and communities to provide for their well being it is appropriate to provide for use and development in the coastal marine area where is consistent the purpose of the RMA. Some infrastructure of national importance and some forms of renewable energy generation, such as tidal, can only locate in the coastal

marine area. In addition aquaculture activities can only locate in the coastal marine area. It is appropriate to recognise the Crown's interest in the location of these activities in the land of the Crown in the coastal marine area when it is consistent with the purpose of the RMA.”

16. It is notable that a significant number of submissions on the PNZCPS refer to the provisions relating to the development of renewable electricity generation technology and associated infrastructure in the coastal environment. Some general themes expressed by submitters who support the appropriate development of renewable electricity generation in the coastal environment include²:

- the PNZCPS places too much emphasis on protection and restoration of the coastal environment, and not enough on appropriate use
- policy on renewable energy is improperly confined to the Coastal Marine Area when it should extend to cover the broader coastal environment
- the PNZCPS considers only selected parts of Part 2 of the RMA (e.g. only limited reference to section 7(i) and (j))
- directing the location of subdivision and development in the coastal environment (i.e. zoning) is inappropriate.

Relationship between NPS and NZCPS

17. The purpose of a NPS is to “state objectives and policies for matters of national significance that are relevant to achieving the purpose of [the] Act”³. Any of these objectives and policies could relate to and affect the Coastal Marine Area or the

² For example see the following:

- MRP submission: <http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/mighty-river-power-nzcps-361.pdf>
- Meridian submission: <http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/meridian-energy-limited-nzcps-445.pdf>
- NZ Wind Energy Association submission: <http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/new-zealand-wind-energy-association-nzcps-407.pdf>

³ Section 45 of the RMA

coastal environment. On the other hand, the purpose of a NZCPS is to “state policies in order to achieve the purpose of [the] Act in relation to the coastal environment of New Zealand”⁴. Put simply, NPS are general in scope and purpose, while the NZCPS is specific to the coastal environment.

18. It is possible, therefore, for the objectives and policies of a NPS to overlap with the policies of the NZCPS, as is likely to be the case in relation to the NZCPS and the proposed NPS for Renewable Electricity Generation. In this regard it is important to keep in mind that NPS and the NZCPS provide guidance to decision-makers for use when considering a particular proposal against the purpose of the RMA, but that decision-makers will apply this guidance on the basis of the facts and circumstances of the specific case.
19. It follows that potentially competing national policy imperatives will need to be given weight in light of specific facts and circumstances at play in relation to applications for resource consent, notices of requirement for designations and proposed provisions of policy and planning documents. This will not always be a straightforward task and, as the number and scope of NPS increase, decision-makers are likely find themselves being called upon to make complex trade-offs. The PNZCPS could, therefore, have an indirect but significant effect on development of this type in the coastal environment by affecting the interpretation and implementation of the proposed NPS.
20. The Minister for the Environment’s Technical Advisory Group (TAG), which provided the Minister with independent expert advice on the Resource Management (Simplification and Streamlining) Amendment Bill 2009, noted the complex task facing decision-makers as they seek to resolve the potential points of competition between different NPS, including the NZCPS. The following comments on this matter are taken from the TAG’s report to the Minister:

“The TAG is keenly aware that one way to improve the quality of environmental management and to streamline and simplify the processes, is to make greater use of

⁴ Section 56 of the RMA

national instruments. It must be recognised however that if central government wishes to determine issues through national instruments, then there is a collateral responsibility on it to ensure that such instruments are clear in purpose and intent and that inconsistencies between instruments are resolved. It is hardly reasonable to send to local government, policy statements which they are required to implement yet which between themselves contain conflicting or unclear requirements.

The TAG is agreed that there is a need for overall strategy for the use of national RMA instruments, and furthermore that these instruments must themselves be clear as to what is expected of those responsible for their implementation.

A fundamental responsibility for resolving conflict and the requirement between national policy statements and other instruments rest with central government rather than local government. Whilst good process will limit the number of conflicting issues between instruments, the reality is that from time to time such an outcome will emerge. As the use of national instruments becomes more important, the need for a resolution mechanism to deal with any conflicts between instruments will correspondingly become more important. There are various central government inter-departmental forums already in place that endeavour to construct a whole of government approach to issues, and we recommend that as part of Phase 2 of the reform process, consideration be given to a – hopefully simple – procedure whereby local authorities experiencing difficulty with apparent conflicts between national instruments might seek a binding determination.”

pp 40-41

D. “Can the New Zealand wind map showing the ranking and suitability of areas for wind farms be provided?”

21. The Ministry for the Environment has not produced a wind map showing the overall ranking and suitability of areas for wind farms.

22. Most wind farms developed or proposed in New Zealand have related to Tier 1 sites (the windiest sites) and accordingly, most assessments of site suitability have tended to emphasise high average wind speeds. This has perhaps contributed to a general perception that development will start at the windiest place and then work its way down the list from there.
23. While it is probably true that the average wind speed is the central factor in site selection, it is important to underscore that the relative merits of a wind farm site are driven by the assessment of a wide variety of factors including, but not limited to and in no particular order:
- average wind speed
 - persistence/consistency of wind
 - wind turbulence and wind shear (change in wind speed with elevation)
 - steepness of terrain
 - land area available (is it a knoll or a long narrow ridge; how many turbines can the site accommodate?)
 - adjacent land use (i.e. a neighbouring forest can retard the wind flow and neighbouring residential development introduces the likelihood of consenting issues)
 - ease of construction (including geological conditions, ability to build suitable roads, etc.)
 - proximity to transmission and/or distribution networks
 - proximity to necessary infrastructure (ports for receiving shipped components, roads suitable for transport of long and/or heavy loads, etc.)
 - proximity to demand centres (and/or retail customer base)

- presence of significant landscape features, significant ecology, or culturally significant sites and attributes
 - the nature of the local regulatory/planning framework
 - the “consentability” of the proposal
 - how the site compares with other new generation options held by the developer (i.e. the site may not be the “best” site overall but may be the most suitable site available to that developer)
 - cost and availability of generation technology (e.g. different wind turbines suit different wind conditions, different size turbines require different spacing between turbines to avoid “wake” effects that can influence the utilization of the available and suitable land area, etc.).
24. Each developer will make their own assessment of these and other factors and feed this into a commercial decision on whether or not to pursue a project. The assumptions made by the party undertaking this exercise will heavily influence the final decision on site selection. Nevertheless, there are some parts of the country where there is little wind and, accordingly, less likelihood of large-scale wind energy development (although even within those areas there might be locations that could conceivably suit small or community-scale wind generation). It is, therefore, very difficult if not impossible, to undertake an overall assessment and national ranking exercise that reliably accommodates all of these factors.
25. As such, there is no single wind map showing the overall ranking and suitability of areas for wind farms. Keeping in mind the caveat set out above, the following may be of assistance to the Board:
- The Electricity Commission, as part of its Transmission to Enable Renewables project, engaged Connell Wagner to identify general regions in New Zealand where a suitable wind resource potential would be likely to exist. I understand that the Board has been provided with copies of the Electricity Commission’s

‘Final report on the transmission to enable renewables project (Phase 1). The Connell Wagner report ‘Transmission to enable renewables – Economic wind resource study’ is attached as Appendix 4 to that report. The methodology and assumptions behind Connell Wagner’s assessment are set out in section 2 of this study and prefaced by the statement that “The purpose of the analysis is primarily to provide information on the geographical spread of potential wind resource, rather than to provide an assessment of the total resource that is accurate in absolute terms. The actual resource that can be utilized depends on many factors ... Connell Wagner has used advanced mesoscale modelling and GIS techniques to quantify suitable wind farm areas. The use of meteorological models and GIS tools has its benefits and disadvantages. In general it is a more quantitative, accurate and consistent method than relying on publicly available information or information provided by developers of wind farms. However the criteria used to select “suitable” wind farm areas is necessarily only an approximation of the many and varied criteria that are used by developers.”

- The National Institute of Water and Atmosphere produced a set of maps in 2006 showing the median annual average wind speed based on data in the 30-year period from 1971-2000 (see figures in **Appendix 1** of this statement). I understand that: (a) the wind speeds were measured at 10 metres above ground, not at turbine hub height (b) the data has been resolved on a ~~10 km~~ 500m grid using the available weather station data with wind speeds between weather stations calculated by interpolation (c) the modeling **does account for large scale terrain effects such as gross changes in elevation and proximity to the coast, but does not account for small scale** terrain effects such as the increase in wind speed over ridge tops and so may underestimate actual wind speeds on elevated sites.
- Between 2006 and 2008 the Energy Efficiency and Conservation Authority (EECA) with Sinclair Knight Merz assessed renewable energy potential in 13 regions across New Zealand⁵. It should be noted that the assessments did not seek to account for how all environmental and cultural issues will affect

Comment [AS1]: Note – correction made verbally at hearing.

Comment [AS2]: Note – correction made verbally at hearing.

⁵ Hawkes Bay, Bay of Plenty, Auckland, Waikato, Canterbury, Taranaki, Tasman, Northland, Marlborough, Manawatu-Wanganui, Wellington, Otago and West Coast.

renewable energy potential. The assessments present indicative estimates for the amount of renewable energy that could be realised in terms of the resource available outside National Parks and using technologies that are already economic or are likely to become economic over the course of the next ten years. Wind energy was identified as a potential in nine of those 13 regions, the relevant resource maps are attached as **Appendix 2** to this statement.

E. “Are there any RMA instruments that deal with how the effects of bio-fuel production can be managed?”

26. There are currently no National Environment Standards or National Policy Statements that specifically deal with the effects of bio-fuel production. Further, the Ministry for the Environment has no current plans to either develop or scope the need for national standards or national policy specific to the effects of bio-fuel production. It is important to keep in mind that these effects are likely to be the same as, or similar to, those associated with general cropping and agricultural practices, and farming and farming-related industrial processes. It is therefore likely that issues relating to contamination, water quality and quantity, air quality, soil quality (and those other matters referred to in section 43 of the RMA) would be addressed at the broader level of effects rather than in relation to the specific effects associated with particular methods of bio-fuel production.

F. “At page 20 of the section 32 analysis, it is stated that, “until recently local authorities have not, in general, developed specific policies to address renewable electricity generation.” Are there recent examples of where they have done this, and if so what are those examples?”

27. Examples of recent policies developed by local authorities that are specific to the generation of electricity from renewable sources are attached as **Appendix 3** to this statement. I note that these examples were drawn from work undertaken by the

Ministry for the Environment in mid 2008 and are current to the time the proposed NPS was drafted.

G. “What evidence did the Crown give at the Project Hayes Environment Court hearing in respect of the benefits of renewable electricity generation and any assessment criteria it considered the court should apply?”

28. The Crown’s evidence was intended to give the Court details of the national benefits of the proposed wind farm. Witnesses from the Ministry for the Environment and Ministry of Economic Development appeared. The Crown’s evidence focused on:

- the Crown’s interest in Project Hayes
- the strategic direction of the Crown on climate change
- New Zealand’s climate change targets and international commitments
- the place of renewable electricity generation in the strategies and policies of the Crown
- why the Crown considered the proposal to be of national significance.

29. Witnesses’ evidence outlined the potential contribution of Project Hayes to:

- the Crown’s target of having 90% of electricity generated from renewable energy sources by 2025 (in an average hydrological year)
- security of supply, including:
 - meeting future demand for electricity by building more generation capacity
 - promoting system resilience through diversification of fuel and location
 - introducing the potential for system integration with hydro-generation
 - avoiding upward pressure on electricity prices by consenting low cost generation

- helping New Zealand meet its climate change obligations by avoiding the need for electricity to be generated from fossil fuels while simultaneously lessening New Zealand’s emissions liabilities under the Kyoto Protocol.
- 30. The Crown did not present any assessment criteria that it considered the Court should apply. The Crown did not comment on local environmental effects.
- 31. A copy of the evidence given by the Ministry for the Environment and the Ministry of Economic Development is attached as **Appendix 4** to this statement.

- H. “In what sense is the lack of amendments to plans and/or policy statements to explicitly recognise the benefits of renewable electricity a “barrier” to the timely and efficient granting of consents? (refer p.14 of the report)”**
- 32. At the time the NPS was drafted, only eleven of 86 local authorities had amended their plans and/or policy statements in response to the government’s decision to broaden the scope of section 7 of the RMA to include: the efficiency of the end use of energy (section 7(ba)); the effects of climate change (section 7(i)); and the benefits to be derived from the use and development of renewable energy (section 7(j)). As a result, applicants across much of New Zealand are unlikely to have a clear understanding of how the consent authority will apply these section 7 matters in the local context. Similarly, council officers are unlikely to have a clear understanding of how the council’s constituents view these national imperatives in the local context.
- 33. In the resulting climate of uncertainty, council officers and decision-makers are more likely to adopt a risk-averse approach and give more weight to policy imperatives that have found expression in local planning documents. This could lead to broad and successive requests for further information (under section 92 of the RMA) as council officers strive to accurately place the application in the local policy context and assess its effects against this framework. It could also lead to conservative decision-making at the council level.

34. Further, it is natural for the capacity of a particular local authority to reflect the issues relevant to it. Accordingly, it can be expected that local authority expertise (and resourcing) will build, over time, around established policy imperatives. Renewable electricity generation technology, and its related effects, is often either new, or new to specific regions of New Zealand. Where plans are silent on renewable electricity, it is unlikely that local authorities will have well established internal expertise or capacity, which in turn increases the likelihood of processing delays and increased costs as applications are either caught in a council processing 'bottleneck' or referred to external consultants.
35. As such, new ideas and technologies *that reflect national policy but do not have explicit policy recognition in plans* are likely to face a more costly and time-consuming resource consent process characterized by intense scrutiny and uncertain (open-ended) processing timeframes. A lack of amendments to plans and/or policy statements to explicitly recognise the benefits of renewable electricity, therefore, poses a "barrier" to the timely and efficient granting of consents.

I. **"It is stated (p.15) that "the philosophy behind the RMA leads it to remain largely silent on how to appropriately balance national and local benefits and effects..." What is the basis of this comment?"**

36. The RMA was originally drafted on the basis that:
- local decision-makers are in most instances, best placed to accurately factor local circumstances and information into the assessment of specific proposals or policy issues against the purpose of the RMA
 - resource management decisions are best made closest to where the effects of those decisions are likely to be felt.
37. In addition, with the exception of certain activities set out in Part 3 of the Act, the RMA seeks to enable activities and establish a statutory regime where it is the *effects* of activities rather than the activities themselves that are subject to control.

Decisions made under the RMA, therefore, require a relative and normative assessment of the particular proposal in its particular setting against the relevant statutory criteria – in other words each resource management case will turn on the facts, the interpretation of which will be assisted by reference to established case law.

38. In this regard, consent authorities and the Courts, routinely consider the various matters in sections 6, 7 and 8 of the RMA that are relevant in a particular instance, and afford differing degrees of weight to each based on the facts of the case when making a decision against the purpose of the RMA (section 5). It is conceivable that in a particular instance a matter, or matters, within section 7 may be given more weight than a matter in section 6 after a fine-grained assessment of national and local benefits and effects of a particular proposal against the purpose of the RMA.

J. “Are the Government’s recently proposed amendments to the RMA likely to have an impact on the proposed NPS (on renewable electricity)? If so, how?”

39. The Resource Management (Simplifying and Streamlining) Amendment Bill 2009 (the Bill) was introduced into Parliament on 19 February 2009 and referred to the Local Government and Environment Committee for consideration. Public submissions closed on 3 April 2009 and the Committee is to report back to the House on 19 June 2009.
40. Subject to the outcome of the Select Committee process, it would appear that clauses 42 – 48 of the Bill, which amend the process of developing, approving and implementing a national policy statement, are relevant to the proposed NPS.
41. The transitional provisions of the Bill are, however, silent on how the proposed amendments will apply to proposed national policy statements that are currently before a board of inquiry. The Board may wish to seek independent legal advice on how the proposed provisions of the Bill may affect the proposed NPS.
42. It is noted that the ‘clause by clause’ analysis in the explanatory note to the Bill states that:

- “**Clause 42** amends section 47 to restrict the liability of a member of a board of inquiry.
- **Clause 43** inserts a new section 47A. The new section gives the Minister the power to direct a board of inquiry to suspend its inquiry and the power to provide the board with additional material to consider. The powers may only be exercised before the board reports to the Minister.
- **Clause 44** amends section 50 to update a cross reference and to provide that the Minister has the right to be heard at a hearing into a proposed national policy statement. Submitters already have the right to be heard.
- **Clause 45** amends section 51 to require a board of inquiry to also consider any additional material provided by the Minister under new section 47A.
- **Clause 46** inserts new section 51A. The new section lets the Minister withdraw all or part of a proposed national policy statement before it is approved.
- **Clause 47** amends section 52 to provide that the Minister may withdraw all or part of a proposed national policy statement after considering the report and recommendations made by a board of inquiry.
- **Clause 48** amends section 55. That section concerns a local authority's duty to amend a document if the document is affected by a national policy statement. The amendment to section 55 more clearly distinguishes between the specific duty to amend a document in a manner directed by the statement, and the overlapping general duty to amend a document to give effect to the statement. The first type of amendment (under the specific duty) must be made without further formality, but the amendment must be publicly notified. The second type of amendment (under only the general duty) must be made using the process set out in Schedule 1.”

K. At Box 5.1: Global Abatement Cost Curve. (p28) Has any attempt been made to undertake a cost curve of the nature shown in Box 5.1 for New Zealand?

43. The Ministry for the Environment last updated the Greenhouse Gas Mitigation Response and Cost Curves for Energy in December 2008 (see **Appendix 5** for a draft of this update soon to be published on the Ministry for the Environment website). I am advised that these cost curves are subject to regular review and will be updated again in the near future once the relevant data has been updated, compiled and analysed.

April 2009



Andrew Clifford Schollum

APPENDIX 1:

**NATIONAL INSTITUTE OF WATER AND ATMOSPHERE –
MEDIAN ANNUAL AVERAGE WIND SPEED FIGURES**

APPENDIX 2:

**ENERGY EFFICIENCY AND CONSERVATION
AUTHORITY – RENEWABLE ENERGY POTENTIAL
FIGURES**

APPENDIX 3:

**MINISTRY FOR THE ENVIRONMENT - RECENT
EXAMPLES OF STRATEGIES, PLANS AND POLICY
STATEMENTS THAT ARE RELEVANT TO THE
GENERATION OF ELECTRICITY FROM RENEWABLE
SOURCES**

APPENDIX 4:

**MINISTRY FOR THE ENVIRONMENT AND MINISTRY
OF ECONOMIC DEVELOPMENT – EVIDENCE GIVEN
ON BEHALF OF THE CROWN AT THE PROJECT HAYES
ENVIRONMENT COURT HEARING**

APPENDIX 5:

**MINISTRY FOR THE ENVIRONMENT - DECEMBER
2008 UPDATE OF GREENHOUSE GAS MITIGATION
RESPONSE AND COST CURVES FOR ENERGY**