

BOARD OF INQUIRY

HAUAURU MA RAKI WIND FARM PROPOSAL

In the matter of The Resource Management Act 1991

And

In the matter of Resource consent applications by Contact Wind Limited to the
Waikato Regional Council in respect of the Hauāuru mā raki Wind
Farm Proposal

And

In the matter of A resource consent application by Contact Energy Limited to the
Waikato Regional Council in respect of transmission infrastructure
related to the Hauāuru mā raki Wind Farm Proposal

BRIEF OF EVIDENCE IN CHIEF OF CHRISTOPHER JOHN DAWSON

INTRODUCTION

Qualifications and experience

- 1) My name is Christopher John Dawson. I hold the qualifications of a Diploma in Parks and Recreation Management with Distinction from Lincoln University (1989), a Bachelor of Social Science with Honours majoring in Geography and Resources and Environmental Planning (1996), and a Post Graduate Diploma in Resources and Environmental Planning from Waikato University (1997). I have twelve years experience in resource management planning in New Zealand and I am a full member of the New Zealand Planning Institute and the Resource Management Law Association.
- 2) My work experience over the past twelve years has involved preparing, processing and reporting on subdivision and land use applications for projects throughout the Waikato, Bay of Plenty, King Country and South Auckland. More recently I have been involved with structure planning, industrial land strategies, quarry extension projects and waste water treatment proposals. I was also engaged by WEL Networks to oversee the consultation activities associated with the consenting of the Te Uku wind park near Raglan and the associated 110 KV line Notices of Requirement for a power line to Te Kowhai.
- 3) I am currently employed as a Senior Planner at Bloxam Burnett and Olliver (BBO), a firm of consulting engineers, planners and surveyors based in Hamilton. I have worked in this capacity since February 2001.

Involvement in the project

- 4) I have been involved with the Hauauru ma Raki (HMR) project on behalf of Environment Waikato since August 2007 and I am familiar with the application site having visited the site twice by land and once by helicopter. I have participated as part of the Technical Focus Group convened by the applicant and have provided input into the set of conditions offered by them. I have also coordinated the final set of suggested Waikato Regional Council conditions with technical advice from Mr Keesing and Mr Blackie.

Expert Witness Code of Conduct

- 5) I have been provided with a copy of the Code of Conduct for Expert Witnesses contained in the Environment Court's Consolidated Practice Note 2006 [2006] NZRMA 357. I have read and agree to comply with that Code. This evidence is within my area of expertise, except where I state that I am relying upon the specified evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Purpose and scope of evidence

- 6) The purpose of my evidence is to confirm the extent and type of Regional Consents required by the project, provide a critique of the evidence of Mr Chrisp in respect of his analysis of Regional planning instruments and to critique the evidence of Mr Daysh in respect of the recommended conditions associated with the Regional consents. I also provide as Attachment 1 to my evidence a set of recommended Regional Council consent conditions with some amendments noted based on technical advice I have received from Mr Keesing and Mr Blackie.

Statutory Instruments

- 7) The entire HMR project lies within the jurisdiction of the Waikato Regional Council (Environment Waikato). Environment Waikato fulfills its role in managing the region's natural resource by the development, implementation and review of its policies and plans. I concur with the evidence of Mr Chrisp that the regional policies that are relevant in the consideration of this proposal are contained within the Waikato Regional Policy Statement, the Waikato Regional Coastal Plan, the Transitional Regional Plan and the Proposed Waikato Regional Plan. I now outline the relevant plans and their status.

Waikato Regional Policy Statement

- 8) The Waikato Regional Policy Statement is operative. Currently the Waikato Regional Policy Statement (RPS) is under review with the intention of notifying the 'second-generation' RPS in August 2010.

Waikato Regional Coastal Plan

- 9) The Waikato Regional Coastal Plan was made operative (in part) on 27 October 2005. Rule 16.5.3 – Current Marine Farm Structures and Appendix III Marine Farming Map 10 and Schedule 5: Current Marine Farms in the Waikato Region remain subject to appeal

and are not yet operative. Council has also prepared Proposed Change No. 1 – Minor Changes to the plan, however this is still in the middle of the First Schedule process. The purpose of the Plan Change is to make minor changes to the workability of the plan, to provide for the installation of temporary structures for monitoring and research as a permitted activity subject to conditions, and to provide for associated vehicle use in relation to relevant existing permitted and controlled activities.

Waikato Regional Plan

10) The Waikato Regional Plan became operative (in part) on 28 September 2007. The outstanding parts of the Regional Plan are the subject of variations that have not yet completed the First Schedule RMA process. Those outstanding parts of the plan and their status are:

- a) Variation No. 2 – Geothermal: All appeals have been resolved and the Variation became operative on 7 November 2008
- b) Variation No. 5 – Lake Taupo Catchment: The purpose of this Variation is to protect water quality in Lake Taupo by managing land use and nutrient discharges. The Variation remains subject to appeal.
- c) Variation No. 6 – Water Allocation. The purpose of this variation is to manage the allocation and use of freshwater over all of the Waikato Region. The text of the Variation replaces that of withdrawn Chapters 3.3 and 3.4. of the Waikato Regional Plan
- d) Variation No. 7 – Minor Variation and Geothermal Maps: The purpose of this variation is to improve the workability of the plan and to amend maps showing significant geothermal features and geothermal water features.

11) Only Variation No. 6 – Water Allocation (Variation 6) is relevant to the consideration of the consents for the HMR project. Variation 6 was notified on 20 October 2006 and hearings were held between December 2007 and March 2008. Decisions on Variation 6 were released by Waikato Regional Council in November 2008. Environment Waikato made an ex parte application to the Court to extend the timeframe within which an appeal must be lodged from 30 working days to 60 working days. This ex parte application was granted by the Court on 17 October 2008. The extended appeal period closed on 6 March 2009 and as at the date of preparing this evidence a total of 26 appeals had been lodged with the Environment Court. A number of section 274 notices are also expected

to be lodged with the Court. I understand from Council staff that the 26 appeals lodged on Variation 6 cover all parts of the Variation and that no part is beyond appeal. However I am also advised that due to the relevant sections of the Proposed Waikato Regional Plan (Chapters 3.3 and 3.4) being withdrawn when Variation 6 was notified, Variation 6 remains as the only statutory document to provide any substantive guidance on water allocation matters.

- 12) I consider that the provisions of Variation 6 are therefore fully under appeal and that while full weight cannot be placed on Variation 6 in any decision making process some weight must be applied. Therefore some weight in any decision must also be placed upon the Transitional Regional Plan if it contains relevant provisions for this proposal.

Transitional Regional Plan

- 13) The Transitional Regional Plan was developed in October 1991 under section 368 of the Resource Management Act to constitute the first regional plan for the Waikato Region. It comprised those existing provisions and authorisations that existed at the time of the enactment of the Resource Management Act in October 1991. It contained a number of General Authorisations, none of which are directly relevant to the consents sought by the applicant. The Transitional Regional Plan is relevant only to the extent that it would confer a discretionary status on any application but provides no further guidance.

Regional Consents

- 14) I have reviewed the list of consents applied for by Contact for the HMR project and confirm that the consents sought are appropriate and correct. For completeness I include below in Table One a list of the relevant consents, the rules under which they are being applied for, the consent numbers allocated by Environment Waikato and the status of the consents applied for.

15)

Table One: Consent details for all HMR consents

Activity	Plan	Rule	Consent Number	Status
Earthworks and roading/tracking associated with the construction of a windfarm including turbines, internal access roads and improvements to local roads.	Waikato Regional Plan	Rule 5.1.4.15	WRC 117912	Discretionary
Earthworks associated with the Whitford Quarry	Waikato Regional Plan	Rule 5.1.4.15	WRC 118074	Discretionary
Water Take from four surface water bodies being the Waikawau Stream, Kaawa Stream, Waikaretu Stream & Waikorea Stream	Variation 6 to the Waikato Regional Plan	Rule 3.3.4.14	WRC 117913 WRC 117914 WRC 117915 WRC 117916	Restricted Discretionary
Water take from an unnamed spring near the Whitford Quarry	Variation 6 to the Waikato Regional Plan	Rule 3.3.4.19	WRC 117920	Non-Complying

Streambed works to construct and maintain a culvert, construct and maintain a 14 metre bridge,	Waikato Regional Plan	Rule 4.2.9.3	WRC 117922	Controlled
		Rule 4.2.8.2	WRC 117923	Controlled
Discharge of quarry process water and wash water associated with up to four concrete batching plants.	Waikato Regional Plan	Rule 3.5.4.5	WRC 117924	Discretionary
		Rule 3.5.4.5	WRC 117925	Discretionary

Critique of Planning Assessment

16) I provide a critique of the planning assessment provided by Mr Mark Chrisp in his evidence. I consider that Mr Chrisp has identified the correct statutory instruments under which the HMR is to be assessed.

New Zealand Coastal Policy Statement (NZCPS)

17) I concur with the assessment that Mr Chrisp has made with respect to the NZCPS. In particular I am of the opinion that provided the appropriate conditions are imposed on the consents (as contained in Attachment 1 to my evidence) with respect to erosion and sediment control, management of water takes and discharges and the proposed offset mitigation proposed in condition 8 of Schedule One, that the proposal will be consistent with the NZCPS.

Waikato Regional Coastal Plan

18) I could not locate any assessment of the Waikato Regional Coastal Plan (WRCP) in Mr Chrisp's evidence. The Waikato Regional Coastal Plan was made operative on 27 October 2005 with the exception of two variations relating to marine farming and marinas. Neither of these variations is relevant in the consideration of the HMR proposal.

- 19) The Waikato Regional Coastal Plan has been prepared to enable Environment Waikato in conjunction with the Minister of Conservation, to promote the sustainable management and integrated management of the Coastal Marine Area (CMA). The CMA covers the area from Mean High Water Springs out to the 12 mile nautical limit of the territorial sea. Therefore the management of the CMA is primarily to do with the management of the foreshore, seabed, coastal water and the air space above the water. However in recognition of the fact that the coastal environment is particularly sensitive to landuse activities that can occur in the adjacent coastal environment, the WRCP aims to achieve integration in the management of these issues.
- 20) The coastal environs in the vicinity of the project site are a finite resource. While this matter is primarily one that falls within the jurisdiction of the Franklin District Council and Waikato District Council, I consider it to also be important from a regional policy perspective. It is important that, where possible, adverse effects on natural character are avoided or remedied.
- 21) I concur with the evidence of Mr Chrisp with respect to the manner in which the design and layout of the HMR project will avoid adverse effects on natural character as much as possible, while acknowledging that it will diminish the visual component of the natural character of the coastal environment.
- 22) The WRCP also has an emphasis on vegetation and habitat as noted in Policy 3.2.1 – Policy – Protection of Significant Vegetation and Habitat.
- (a) *Identify areas of significant indigenous vegetation and significant habitats of indigenous fauna and protect by (i) avoiding any adverse effects of subdivision, use and development on the areas and habitats listed in Policy 1.1.2 (a) of the NZCPS; (ii) Avoiding or remedying any adverse effects of subdivision, use or development on the areas listed in Policy 1.1.2 (b) of the NZCPS.*
 - (b) *Identify the conservation values (other than significant indigenous vegetation and significant habitat of indigenous fauna identified under Policy 3.2.1 (a) above.... And protect by avoiding as far as practicable any adverse effects..... on those values and if avoidance is not practicable, adverse effects on those values are mitigated and provision made for remedying those effects, to the extent practicable.*
- 23) This policy emphasizes the importance of establishing the nature and quality of any vegetation to be removed and assessing the response to that removal in light of the need to protect the highest quality significant vegetation areas. Some allowance is made for the mitigation of adverse effects where avoidance is not possible.

24) I concur with the evidence of Mr Chrisp that the HMR project will not give rise to a need for resource consent for the removal of indigenous vegetation as any vegetation removal will not be within a “high risk erosion area” as defined in the Waikato Regional Plan or will be within the allowable limit of less than 1 hectare within a 12 month period¹. I therefore consider that the proposal will be in accordance with the intent of the WRCP.

Waikato Regional Policy Statement (WRPS)

25) I consider the relevant objectives and policies to be those relating to Land and Soil, Water, Coast, Plants and Animals (Biodiversity) and Energy. I consider that Mr Chrisp has appropriately discussed the objectives and policies relating to Energy, Infrastructure, Coastal and Biodiversity in his evidence. However, I consider his assessment on both the Land and Soil and Water sections of the WRPS to be brief. I provide some additional comment here.

Land and Soil (WRPS Section 3.3)

Relevant Objectives/Policies and Other Methods

Objective – Net reduction in the effects of accelerated erosion and those effects avoided where practicable.

Policy One – Avoid, Remedy or Mitigate Accelerated Erosion

Ensure that land users:

- b) *avoid where practicable, practices that cause accelerated erosion; and*
- c) *remedy or mitigate the adverse effects of accelerated erosion if it occurs.*

26) Section 3.3 of the WRPS identifies that the western hill country area is prone to sheet erosion due to the nature of the underlying geology and the thickness of the volcanic ash. In addition many of the underlying rocks are weathered and some are prone to mass movement.

27) Section 3.3.6 identifies that activities such as road construction amongst other activities can lead to accelerated erosion if not appropriately managed. Accelerated erosion is erosion that is triggered or caused by human activity. The effects of accelerated erosion can include impacts on the clarity and nutrient status of water bodies as well as the value of those water bodies for recreational and aesthetic purposes.

¹ Permitted Activity Rule 5.1.4.11 of the Waikato Regional Plan (WRP) subject to the conditions in Section 5.1.5 of the WRP

28) The proposed wind farm will require the construction and upgrade of a significant number of roads and turbine platforms with the potential to generate significant amounts of sediment. The potential for accelerated erosion is high if these matters are not adequately controlled through appropriate management plans, conditions and monitoring provisions.

29) The relevant consents and conditions relating to this matter are WRC 117912 and WRC 118074 both of which require compliance with the General Conditions in Schedule One. I note the requirement within Schedule One for the development of an Earthworks Design and Management Plan (condition 10), an Erosion and Sediment Control Plan (condition 26) and a Spill Prevention and Response Plan (condition 54).

30) I rely on the evidence of Mr Blackie and particularly his comments on the role and effectiveness of management plan conditions for my opinion that the intent of these objectives and policies from the WRPS will be met by the proposed wind farm.

Water (WRPS Section 3.4)

Relevant Objectives/Policies and Other Methods

- **Objective** – Net improvement of water quality across the Region

Policy One – Protection of Outstanding Water Bodies

Ensure the protection of significant characteristics of the quality of outstanding water bodies.

Policy Two – Other Water Bodies

Determine the characteristics for which other water bodies are valued and manage those water bodies to ensure that any adverse effects on those characteristics are avoided, remedied or mitigated.

Policy Three – Riparian Management

Ensure that the adverse effects of land use on water quality and aquatic habitats are avoided, remedied or mitigated.

- **Objective** – The range of uses of water reliant on the characteristics of flow regimes maintained or enhanced.

Policy One – Protection of Significant Flow Regimes

Ensure the protection of the significant characteristics of flow regimes where they:

- Contribute to significant wild and scenic character; or
- Form the basis of significant recreational uses; or
- Support significant ecosystems

Policy Two – Modification of Flow Regimes

Allow changes to existing flow regimes while avoiding, remedying and mitigating adverse effects on the environment.

- 31) The WRPS identifies that reduced water quality due to both point and non-point source contamination can adversely affect water quality. The potential for non-point source contamination to adversely affect streams and the coastal marine area within the project site could be significant if this issue is not managed through appropriate management plans, conditions and monitoring regimes. Soil erosion from vegetation clearance and land disturbance can contribute to the sedimentation and nutrient enrichment of waterways. The modification of flow regimes in waterways can result in increased water temperature and nutrient levels and reduced oxygen levels. This in turn can adversely affect in-stream uses, habitats, recreational uses and aesthetic character.
- 32) The HMR project requires water take consents from five water bodies comprising four streams and one spring. The relevant details and rules associated with these takes are listed above in Table One of my evidence. Based on the evidence of Mr Vaughan Keesing I consider that the adverse effects of these takes will be appropriately avoided, remedied or mitigated and that appropriate conditions have been recommended.
- 33) Mr Keesing has recommended some specific changes to the water take conditions and these are highlighted in Track Changes in the WRC conditions attached to my evidence as Attachment One. I rely on the evidence of Mr Keesing for my opinion that with the recommended changes, the adverse effects of the water takes on the specific streams will be appropriately mitigated.
- 34) Consent WRC 117920 relates to an application to take up to the full flow of an unnamed spring near the Whitford Quarry which is a non-complying activity under the Proposed Waikato Regional Plan and a Discretionary Activity under the Transitional Regional Plan. Mr Keesing has recommended the addition of condition 3 which requires that the intake point for this water take be no closer than 20 metres to the spring head. This is reflected in the conditions attached to my evidence. In my opinion the HMR project will be consistent with the intent of the Water Objectives and Policies in the WRPS.
- 35) I concur with the assessment provided by Mr Chrisp with respect to the Coast (WRPS Section 3.5), Biodiversity (WRPS Section 3.11) and Energy (WRPS Section 3.12) of the Waikato Regional Policy Statement.

36) In the submission lodged by the Waikato Regional Council at paragraph 1.9 concern was expressed at the lack of detail relating to the offset mitigation proposal put forward by the applicant. I now consider that this concern would be met by the imposition of condition 8 in Schedule One – General Conditions which requires the development and submission of an Ecological Offset Mitigation Plan for approval by the Waikato Regional Council prior to any construction commencing on any stage of the windfarm. In relation to the adverse effects arising from activities under the jurisdiction of the Waikato Regional Council and based on the evidence of Mr Keesing I now consider that the requirement to riparian fence and plant 1000 metres (500 metres on both sides) of a selected stream within the project area plus fencing and planting within the Waikaretu Stream Catchment to be appropriate mitigation for the water takes, culverts, bridges and other works.

37) Mr Keesing has noted at paragraph 1.33 of his evidence that the conditions at present do not provide for the future legal protection of the enhanced mitigation feature. I concur with Mr Keesing's evidence but note that unless the land on which the enhanced mitigation feature is located is owned by the applicant, there is no ability to impose a condition on this consent. It would comprise the imposition of a condition on a third party. This is a concern as it leaves the long term protection of the enhanced mitigation feature uncertain. The applicant may wish to comment further on this matter in its evidence.

Waikato Regional Plan

38) The HMR project requires a substantial number of Regional Consents from the Waikato Regional Council and these are detailed in Table One of my evidence. All of the consents being applied for have the status of either a Controlled or a Discretionary activity apart from consent WRC 117920 which is Non Complying.

39) I rely on the evidence of Mr Keesing and Mr Blackie for my opinion that with the imposition of the conditions contained in Attachment One to my evidence, that any adverse effects of the proposed activity will be avoided, remedied or mitigated. In my opinion it is appropriate to grant the Non Complying consent to take up to the full flow of an unnamed spring in the vicinity of the Whitford Quarry due to the suite of recommended conditions attached to this consent along with the offset mitigation offered under condition 8 (d) of Schedule One.

Conditions

40) I have coordinated the development of an amended set of WRC conditions and these are included as Attachment One to my evidence. I was involved in the Technical Focus Group discussions with the applicant over these conditions and can confirm that all of these consent conditions follow the standard Waikato Regional Council approach to condition drafting. All of the suggested amendments are in track changes and I provide a summary below in Table Two of the specific changes from those comprising Exhibit SGD8 as part of Stephen Daysh’s evidence and the rationale behind them.

Table Two: Recommended Changes to WRC Conditions

Consent/NOR	Condition No.	Change	Rationale
WRC 117912 – earthworks on entire site.	No change.		
WRC 118074 – earthworks for Whitford Quarry	2.1	Delete the words “after the commencement” and replace with “prior to any exercise”	This sets the timeframes for providing a bond to secure compliance with the consent conditions. More appropriate to have the bond in place prior to works starting than 3 months after consent has commenced.

WRC 117913, 117914, 117915m 117916 – water takes from various streams	7	Delete additional words to make condition simpler and confirm that temperature is measured in an unshaded position.	Stream temperature is critical for aquatic life. Changes to the condition ensure that temperature will be accurately monitored and that abstraction will be postponed if it increases above a set level. Refer to paragraph 1.16 in the evidence of Mr Keesing.
	11 (vi)	Amend record keeping requirements from hourly to 30 minute for temperature.	This change provides a more accurate assessment of stream temperature as part of the consent holders overall record keeping requirement.
WRC 117920 – take up to full flow from unnamed spring	Delete condition 3	Requirement for Council staff to be allowed access for monitoring.	Ultra vires as a condition, more appropriate as an advice note (see advice note 6).
	Insert new condition 3	Ensure water intake is no closer than 20 metres to the spring head.	This will ensure that the water take will not directly affect water levels within the spring head itself.
WRC 117922 – construct and maintain a culvert	1	Add requirement for this consent to be subject to Schedule One – General Conditions	This allows the smaller consents to be subject to the more comprehensive requirements of Schedule One.

	10	New condition 10 relating to ongoing fish passage through the culvert.	This condition requires fish passage to be provided on an ongoing basis and that remedial works be undertaken in a timely manner.
	11	Amended reference to the January 2009 Erosion and Sediment Control Guidelines.	The Erosion and Sediment Control Guidelines have recently been updated and this reference reflects that.
WRC 117923 – to construct and maintain a bridge	1	Add requirement for this consent to be subject to Schedule One – General Conditions	This allows the smaller consents to be subject to the more comprehensive requirements of Schedule One.
	3	Add requirement for bridge designs to be approved by WRC.	This addition will ensure that Council technical staff have the opportunity to review and approve design plans prior to construction.
	7	Amended reference to the January 2009 Erosion and Sediment Control Guidelines.	The Erosion and Sediment Control Guidelines have recently been updated and this reference reflects that
	12	Delete surplus condition	This requirement now covered by addition to condition 3.

WRC 117924 – discharge process water and stormwater.	8	Add requirement that daily rainfall be measured at the Whitford Quarry site.	The Whitford Quarry is located centrally to the entire project site. This is an appropriate position to locate a rainfall gauge for reference purposes.
	26, 27, 28	Addition of standard administrative conditions.	Additional administration conditions relating to payment of administrative charges and future review of conditions.
WRC 117925 – discharge process water and stormwater.	26	Additional condition allowing future review.	Condition specifying review period
WRC 117927 – earthworks, roading and tracking associated with electricity infrastructure.	No change.		
Schedule One – General Conditions	Heading	Addition of reference to consents 117922 and 117923 in heading	Ensure that the requirements of Schedule One also apply to these two consents which are for constructing and maintaining a culvert and bridge.
	4	Deleted	Ultra vires as a condition, more appropriate as an advice note.

	8	New condition relating to Ecological Offset Mitigation Plan.	This repeats the same condition contained in the WDC and FDC consents but relates specifically to those matters within the jurisdiction of the Waikato Regional Council.
	14, 15 & 16	Amendment to the winter months working period	Standard WRC approach to limit winter working during this period as discussed in Mr Blackies evidence.
	23	Additional text relating to water quality during storm events.	This additional text clarifies that during a storm event, the suspended solids concentration may be above the standard (100 grams) but may not be above the background level as measured upstream from the discharge.
Schedule One – General Conditions	25 & 27	Amendment to Erosion and Sediment Control reference.	Reflects that the official reference was updated in January 2009.
	30	Additional text relating to baseline monitoring.	This will ensure that baseline monitoring and activity monitoring are carried out in the same season to ensure an appropriate baseline is derived from the data.
Schedule One –	30b	Clarification of	This additional text ensures

General Conditions		rainfall measuring requirements.	that more sediment monitoring takes place after a period of reasonable rainfall as measured by the Whitford quarry gauge.
	34 - 38	Additional conditions relating to flocculation.	Addition of standard conditions relating to flocculation design, approval and monitoring.
	41	Engineer approval of erosion and sediment control structures.	Additional condition requiring engineer approval of the design of these structures post completion of them and prior to bulk earthworks commencing.
	Advice Notes	Addition of standard advice notes	Standard set of advice notes for an applicant to provide direction on matters that cannot be encompassed in a condition but are still relevant..

Conclusion

41) I consider that the processes followed by the applicant in the development of the HMR wind farm have been robust and comprehensive. In my opinion the recommended conditions relating to those matters within the jurisdiction of the Waikato Regional Council are appropriate and will ensure that the potential adverse effects of the proposal will be avoided, remedied or mitigated.

Christopher John Dawson - 27 March 2009

ATTACHMENT ONE:
WAIKATO REGIONAL COUNCIL
CONSENT CONDITIONS
(WRC SUGGESTED AMENDMENTS)