

**In the Environment Court
Christchurch Registry**

ENV-2011-CHC-090

Under the Resource Management Act 1991

and in the matter of direct referral of an application for resource consents by Meridian Energy Limited in respect of the Project Hurunui wind farm proposal under section 87G of the Resource Management Act 1991

Between

Meridian Energy Limited,

and

Hurunui District Council,

and

Canterbury Regional Council,

and

Others

**Statement of Supplementary Evidence of Scott Hooson on
behalf of Meridian Energy Limited**

15 August 2012

Introduction

1. My full name is Scott Hooson.
2. I am a Senior Ecologist with Boffa Miskell Limited. I have the qualifications and experience set out at paragraphs 1 to 8 of my statement of Evidence in Chief (EIC), dated 20 January 2012.
3. I repeat the confirmation given in my EIC that I have read, and agree to comply with, the Code of Conduct for Expert Witnesses (Consolidated Practice Note 2011).

Migrant Bird Species

4. As part of the assessment of effects on avifauna, provided in the 'Assessment of Effects on Avifauna' Report attached to my EIC, a desktop assessment of the risks to migrant shorebirds was undertaken. The findings of this assessment are summarised in paragraphs 58 and 97 of my EIC and discussed further in paragraphs 87 and 91 of my rebuttal evidence, dated 20 June 2012. The desktop assessment of migrant species found that the potential exists for nine migrant shorebird species to fly over the proposed wind farm site, but the evidence suggested that their flight paths are most likely to be coastal. Consequently, the risk of collision and a negative impact on the populations of these species was considered to be low. Dr McClellan and I agreed that an intensive post-construction blade strike monitoring programme, which is a requirement of the District Council consent conditions proposed by Meridian, would be the best means of indicating whether the wind farm is having any impact on migrant shorebirds.
5. Since preparing my EIC and rebuttal statement, a single New Zealand pied oystercatcher in-flight call sequence was detected at the nearby Mt Cass Wind farm site at 04:34 on 17 July 2012¹. This recording was captured during 696.5 effective hours of a day and night, fixed bio-acoustic survey using seven automated digital sound recorders over a seven night period between 16 and 23 July 2012. Because the New Zealand pied oystercatcher activity was detected in the early hours of the morning it is thought to be from migratory birds rather than movements of local birds¹.

¹ Kessels and Associates Limited. 2012. *MainPower New Zealand Limited Mt Cass Wind Farm: Winter 2012 Acoustic Avifauna Survey*. Unpublished Report prepared for MainPower Ltd. August 2012. 5p.

6. On the basis of this new information, I recommend that a stage one pre-construction monitoring programme for migrant shorebirds, using appropriate and recognised monitoring methods, be undertaken at the Hurunui Wind Farm site. Monitoring should be undertaken from appropriate locations within the wind farm site to ensure that migrant shorebirds flying across the wind farm are recorded, during at least one period of the northward (summer) migration (January - February) and at least one period of the southward (winter) migration (July - August). In the unlikely event that migrant shorebirds are recorded crossing the proposed wind farm site in sufficient numbers to indicate that collisions could impact regional or national populations, then a more intensive (stage two) monitoring programme would need to be established. The decision to undertake further stage two monitoring should be determined by a suitably qualified and experienced avian ecologist, in consultation with the Hurunui District Council. The purpose of this monitoring would be to more accurately identify the potential risk the wind farm is likely to pose to migrant shorebirds. If possible, this should take into account any other available data on migrant shorebirds and their flight paths across the wider area.
7. I have proposed consent conditions, attached as Appendix 1, to ensure this monitoring is undertaken.
8. If following the construction of the wind farm, blade strike monitoring shows that the wind farm is having an adverse effect on migrant bird species at the regional or national population level, that are listed as Threatened or At Risk, condition 6 of the revised bird strike monitoring conditions, in Appendix 4 of my EIC, is proposed to ensure that a reasonable course of action will be taken to address those effects.
9. If during post-construction blade strike monitoring, any unforeseen adverse effects on migrant birds occur, review conditions are proposed by the Hurunui District Council that allows the conditions of consent to be reviewed to deal with any unforeseen adverse effects on the environment².

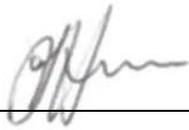
Interim Preconstruction Avifauna Monitoring Report

10. In paragraphs 55, 60 and 85 of my rebuttal statement I refer to an Interim Pre-construction Avifauna Monitoring Report that was in preparation at that time. It was agreed by all parties during caucusing that a full and detailed summary of

² Exhibit HGR1, received by Meridian on 6 August 2012.

all the avifauna data from the surveys undertaken was required³. This report, which provides this full and detailed summary, has been completed and is appended as Attachment 2 to this supplementary statement of evidence. It presents the findings of all of the bird survey data collected between November 2009 and January 2010 and November 2010 to July 2011.

11. Both my EIC and rebuttal evidence were prepared using the same full set of avifauna monitoring data that is detailed in the Interim Pre-construction Avifauna Monitoring Report. Therefore, none of the findings or conclusions in my EIC or rebuttal evidence have changed.



Scott Hooson

15 August 2012

³ Paragraph 13 of the Joint Statement of Avifauna Experts

Appendix1: Proposed Migrant Shorebird Monitoring Conditions

1. The consent holder shall complete a stage one monitoring programme for migrant shorebirds, prior to the construction of the wind farm, using appropriate, recognised monitoring methods (as determined by a suitably qualified and experienced avian ecologist).

Monitoring should be undertaken during one northward (summer) migration (January - February) and one southward (winter) migration (July - August).

Monitoring should be undertaken from a sufficient number of locations to ensure adequate coverage of the wind farm (as determined by a suitably qualified and experienced avian ecologist), to record the flight paths of birds moving across the site.

2. If migrant shorebirds are recorded crossing the proposed wind farm site in sufficient numbers to indicate that mortality from collisions could impact regional or national populations (as determined by a suitably qualified and experienced avian ecologist, in consultation with the Hurunui District Council), then a stage two (more intensive) monitoring programme shall be undertaken, prior to construction, to identify any potential adverse effects on migrant shorebirds and how to appropriately avoid, remedy or mitigate these.
3. The consent holder must submit to the Hurunui District Council a report on the monitoring undertaken pursuant to conditions X and X above, prepared by a suitably qualified and experienced avian ecologist. This report should be submitted within three months of completion of the stage one monitoring and three months of completion of the stage two monitoring, if the latter occurs.