## **PROPOSED CONDITIONS**

- 1 The proposal shall be constructed generally in accordance with the plans and relevant details submitted with the resource consent application received by Council on 2 October 2015, and the further geotechnical assessment received by Council on 29 February 2016, except where modified by the following conditions.
- 2 The consent holder shall advise the Council, in writing, of the start date of the works. The written advice shall be provided to Council at <a href="mailto:rcmonitoring@dcc.govt.nz">rcmonitoring@dcc.govt.nz</a> at least five (5) working days before the works are to commence.

#### General

- 3 The maximum number of turbines shall not exceed three.
- 4 The turbine model shall be the Gamesa G58Enercon 53 turbine, or one of a lesser noise rating.
- The maximum height of the structures, to the tip of the blade shall not exceed <del>126m</del> 90m above the existing ground level.
- 6 The wind turbines shall be all finished in the same, neutral off white ora light gray (RAL 7035), with low reflectivity coloura matte finish.
- 7 Lattice pylons shall not be used as wind turbine support structures.
- 8\_All turbines shall be of a similar size and appearance.
- 9 The turbines shall be placed within 30m of the following GPS locations, but no closer to the residential dwellings at 22 and 90 Pryde Road:

Turbine	GPS location	Platform elevation
South-East Turbine	S45°41.486'	399masl
	E170°34.957'	
North-East Turbine	S45°41.412'	395masl
	E170°34.957'	
North-West Turbine	S45°41.355'	406masl
	E170°34.939'	

10 All electricity transmission lines on site shall be undergrounded.

## **Geotechnical**

- 11 A geotechnical assessment shall be undertaken by a suitably qualified person -prior to construction to allow proper geotechnical design to be carried out for the turbine foundations. The geotechnical assessment will include geological mapping and a review of stereoscopic aerial photography to delineate the extents of slope instability.
- 12 Slope instability analysis shall be undertaken once final platforms are confirmed.

  These analyses should consider both static and seismic stability.
- 13 Post foundation construction, mapping and evaluation of any defects and lineaments encountered shall be undertaken to confirm the safety of the turbine locations.
- 814 Any fill utilised for foundation stability shall be located and compacted in accordance with NZS 4431:1989. Certification that the NZS has been complied with shall be provided to the Dunedin City Council.

# **Navigational Lighting**

- P15 Each wind turbine must be lit with a medium intensity red light, with a minimum 1,600 candela, located on the top of the mast and visible in all directions.

  1016 As the turbines are constructed and prior to commencing generation, the consent holder shall forward a report to the Civil Aviation Authority and GroupEAD Asia Pacific so the aeronautical charts can be amended to depict the turbines on the site. This should include the precise location of each turbine, elevation on the ground at each turbines and the maximum height of each turbine (to the tip of the blade) above ground level. A copy of this report shall also be provided to the Dunedin City Council by email to remonitoring@dcc.govt.nz, and titled 'LUC-2015-469 Amendment to CAA Charts'.
  - 4117 All navigational lights shall be shielded on the horizontal plane to avoid downward light spill.

### Hazardous Substances

- 4218 Any refuelling, lubrication or mechanical repairs shall be undertaken in a manner as to ensure that no spillages of hazardous substances occur on the land surface or near any ephemeral surface depression where potable supply may be sought.
- 4319 An oil spill containment kit shall be retained on-site and accessible at all times.
- Staff or contractors carrying out any maintenance, refuelling or lubrication on the site should be familiar with protocols managing spillage of hazardous substances.
- 1521 \_\_\_\_ If any fuel or oil spillage in excess of 5 litres occurs, the consent holder shall:
  - (a) Immediately take action that is necessary to stop/ and or contain such escape, and
  - (b) Take all reasonable steps to remedy or mitigate any adverse effects on the environment resulting from the escape, and
  - (c) Immediately inform both the Dunedin City Council Consents Manager, and Otago Regional Council Compliance Manager of the spill.

#### **Turbine Operation**

- The consent holder shall obtain a report from a suitably qualified person within 18 months of commencement of generation, to confirm that which details the extent and duration of any shadow flicker caused by the rotation of wind turbines is consistent with that set out in Enercon Shadow Assessment attached at Appendix 1 to these conditions. On the curtilage of residential unit existing at the date of the grant within a 1km radius of the turbines.
- Should that report identify any residential units identified as 'shadow receptors' detailed above experiencing shadow flicker within the curtilage of more than 30 hours per calendar year, the consent holder shall submit a plan to the Consent Authority outlining how the turbines will be operated to reduce flicker to no more than 30 hours per calendar year.
- Where turbines are shown to affect television reception as assessed by an independent and suitability qualified radio engineer (at the landowners expense) on any residential unit within 1km radius of the turbines and existing at the date of the grant, then the consent holder shall provide alternative television reception arrangements at no cost to the occupier such that the television reception is no worse than prior to the construction of the turbines.

### Noise

<u>25</u> -The consent holder shall ensure that, at the assessment positions in condition 27 below, at any wind speed, wind farm sound levels do not exceed the greater of 40 dB LA<sub>90(10 min)</sub> or the background sound level LA<sub>90(10 min)</sub> plus 5 dB.

- 26 Wind farm sound shall be measured and assessed in accordance with NZS 6808:2010.
- 27 The assessment positions shall be outside at the noise sensitive locations, defined in accordance with NZS 6808:2010, at:
  - a. 22 Pryde Road;
  - b. 90 Pryde Road; and
  - a.c.110 Porteous Road.
- 1928 Prior to the construction of the wind farm, a background sound level report shall be submitted to the Dunedin City Council by email to rcmonitoring@dcc.govt.nz, titled 'LUC-2015-469 Background Sound Data', in accordance with section 8.2 of NZS 6808:2010. Background sound shall be measured at the assessment positions in condition 27. If access to these locations is not granted then alternative positions may be used subject to approval by the Dunedin City Council.
- 2029 A prediction report shall be submitted to the Dunedin City Council by email to remonitoring@dcc.govt.nz, titled 'LUC-2015-469 Sound Level Predictions', in accordance with section 8.4.2 of NZS 6808:2010. This report shall demonstrate predicted compliance with the noise limits in condition 25 above.
- 2130 A compliance assessment report shall be submitted to the Dunedin City Council by email to remonitoring@dec.govt.nz, titled 'LUC-2015-469 Sound Level Compliance', in accordance with Section 8.4.1 of NZS 6808:2010, the purpose of which is to confirm compliance with the noise standards in condition 25 above.

## **Environmental Monitoring and Reporting**

- 2231 An Ecological Monitoring Plan (EMP) shall be prepared by an independent and suitability qualified and experience person and submitted to the Consent Authority prior to commencing any excavations on the site.
- 2332 An updated copy of that plan and monitoring data shall be submitted annually for the first three years after the commencement of power generation and every two years thereafter on the month of the grant for a further three cycles. That plan shall at minimum include:
  - (a) A summary of all the environmental monitoring undertaken for the previous reporting period;
  - (b) Discussion on any environmental trends identified over the life of the project and the previous reporting period;
  - (c) A detailed analysis of bird strike findings set out below.
- The consent holder shall monitor bird strike and report in the EMP. This shall be carried out as detailed below:
  - (a) The consent holder shall retrieve any bird carcasses located on the site. For the first three years of operation, and on a weekly basis during summer and spring, and on a monthly basis during the remainder of the year.
  - (b) During the first three years after the commencement of operation, all bird carcasses found shall be identified by species, age class (i.e. juvenile or adult), gender, the cause of death (where possible), location of carcasses in relation to the turbines. This assessment shall be carried out by an independent and suitably qualified expert in avifauna.
  - (c) If the consent holder identifies any significant adverse effect as a result of the turbine operation, a mitigation programme shall be developed in consultation with both the Consent Authority and Department of Conservation and may result in on-going monitoring beyond the initial three year monitoring period.
  - (d) Bird strike carcasses shall be photographed, recorded and disposed of at a suitable facility or site.
  - (e) Should bird strike carcasses exceed more than two raptor species per calendar year, the consent holder shall allow vegetation growth around the

turbine area to naturally occur in order to minimise the visibility of bird carcasses to raptor species.

For the purpose of clarity, the consent holder is advised should bird mortality exceed levels not anticipated and comprise a predominance of native species that are regarded as threatened or in decline, the consent holder may be required to cease operation of the turbines during particular periods or climatic conditions.

# Transportation

- The consent holder shall engage a suitably qualified person to design the layout of the Porteous Road/State Highway 1 intersection. The consent holder shall supply the consent authority with written confirmation from the road controlling authority that the Porteous Road/State Highway 1 intersection has been suitably designed. The design of the Porteous Road/State Highway 1 intersection shall be approved prior to any construction works commencing.
- An application to carry out work within the State Highway road reserve and an appropriate traffic management plan shall be submitted to the New Zealand Transport Agency's network management consultant, MWH New Zealand Limited of Dunedin, at least seven working days prior to work commencing on the State Highway road reserve.
- Engineering plans prepared by a suitably qualified person, showing the full details of the construction of all roading improvements (including Porteous Road), shall be submitted to and approved by the Group Manager Transportation prior to construction. The consent holder shall carry out those works in accordance with the approved plans.
- <u>2837</u> Upon completion of construction of the roading improvements, all works shall be tested to demonstrate that they meet the acceptance requirements of the DCC Code of Subdivision and Development.
- 2938 Upon completion of all of the roading improvements, the works shall be certified as having been constructed in accordance with the approved plans and specifications.
- The consent holder shall provide the road controlling authority with a detailed traffic management plan for the transportation of the windfarm components. The consent holder shall supply the consent authority with written confirmation from the road controlling authority that the traffic management plan has been approved. The traffic management plan shall be approved prior to the transportation of the windfarm components.
- Any damage to the Council's transportation network or the State Highway, as a consequence of transportation of construction materials and components to and from the site, shall be repaired at the applicant's expense.
- Where conditions of this consent require the provision of further information such as reports or management plans by the consent holder, the Consent Authority may commission a peer review of this information to certify its accuracy and compliance with conditions of consent. Any such peer review shall be at the consent holder's expense.

## **Contact & Complaints Procedure**

The consent holder shall establish and publicise a local telephone number and email address so that the local community have a specific point of contact should they wish to raise any issues associated with the construction or operation of the windfarm. A log book shall be kept of all calls and emails received, and made available to the Resource Consents Manager upon request.

- The complaint records shall include the date, time, duration of any incident, the location of the complainant when the incident was detected, the possible cause of the incident and the corrective action taken by the consent holder.
- Any issues arising from the complaints procedure shall be considered by the consent holder in relation to revising the Noise Management Plan where appropriate.

### **Closure & Remediation**

If the wind-farm ceases operation, or is decommissioned for any other reason, then all the turbines above ground structures shall be removed and turbine footings covered and revegetated consistent with the surrounding vegetation composition.

## Archaeology & Accidental Discovery

*3746 If the consent holder:* 

- (a) discovers koiwi tangata (human skeletal remains), waahi taoka (resources of importance), waahi tapu (places or features of special significance) or other Maori artefact material, the consent holder shall without delay:
- (i) notify the Consent Authority, Tangata whenua and Heritage New Zealand and in the case of skeletal remains, the New Zealand Police.
- (ii) stop work within the immediate vicinity of the discovery to allow a site inspection by Heritage New Zealand and the appropriate runanga and their advisors, who shall determine whether the discovery is likely to be extensive, if a thorough site investigation is required, and whether an Archaeological Authority is required.

Any koiwi tangata discovered shall be handled and removed by tribal elders responsible for the tikanga (custom) appropriate to its removal or preservation. Site work shall recommence following consultation with the Consent Authority, Heritage New Zealand, Tangata whenua, and in the case of skeletal remains, the New Zealand Police, provided that any relevant statutory permissions have been obtained.

- (b) discovers any feature or archaeological material that predates 1900, or heritage material, or disturbs a previously unidentified archaeological or heritage site, the consent holder shall without delay:
- (i) stop work within the immediate vicinity of the discovery or disturbance; and
- (ii) advise the Consent Authority, Heritage New Zealand, and in the case of Maori features or materials, the Tangata whenua, and if required, shall make an application for an Archaeological Authority pursuant to the Heritage New Zealand Pouhere Taonga Act 2014; and
- (iii) arrange for a suitably qualified archaeologist to undertake a survey of the site.

Site work shall recommence following consultation with the Consent Authority.

#### Review Clause

- In accordance with section 128 the Consent Authority may serve notice on the consent holder within the month of the grant of consent on the 1<sup>st</sup>, 2<sup>nd</sup>, 5<sup>th</sup> and 10<sup>th</sup> anniversary of its intentions to review any of the conditions of this consent for either of the following purposes:
  - (a) To address any adverse effects on the environment that may arise from the exercise of this consent, including noise, glare, flicker, transportation effects, effect on potable supply, or effects on avifauna that was not sufficiently addressed during the consenting process.
  - (b) To require the consent holder to adopt the best practicable option to avoid, remedy or mitigate any effects on the environment.