

# Project Approval

## Section 75J of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure under delegation from the Minister enforced from 1 October 2011, the Planning Assessment Commission of New South Wales (the Commission) approves the Project application referred to in Schedule A, subject to the conditions specified in Schedules B to G.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the Project.

Red type represents Modification 1 – October 2015.

**Member of the Commission**

**Member of the Commission**

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Sydney

2013

### **SCHEDULE A**

**Application No.:**

MP 10\_0157

**Proponent:**

Bodangora Wind Farm Pty Ltd

**Approval Authority:**

Minister for Planning & Infrastructure

**Land:**

Approximately two kilometres north-east of Bodangora and 15 kilometres north-east of Wellington, in the Wellington local government area. The Project area comprises the land owned by a total of eight individual, private land owners spanning over an area of 8,469 hectares, approximately 18 kilometres from east to west and 12 kilometres from north to south.

**Project:**

**Bodangora Wind Farm Project**

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## DEFINITIONS

|                         |  |
|-------------------------|--|
| Act, the                | <i>Environmental Planning and Assessment Act, 1979.</i>  |
| Ancillary Facility      | Temporary facility for construction, including for example an office and amenities compound, construction compound, batch plant (concrete or bitumen), materials storage compound, maintenance workshop, testing laboratory or material stockpile area.  |
| CEMP                    | Construction Environmental Management Plan.  |
| Conditions of Approval  | The Minister's Conditions of Approval for the Project.   |
| Construction            | Includes all work in respect of the Project other than: <ul style="list-style-type: none"> <li>• survey, acquisitions, building / road dilapidation surveys;</li> <li>• investigative drilling, excavation, or salvage;</li> <li>• minor clearing or translocation of native vegetation;</li> <li>• establishing ancillary facilities / construction work sites (in locations meeting the criteria identified in the Conditions of Approval);</li> <li>• installation of environmental impact mitigation measures, fencing, enabling works;</li> <li>• other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads, minor adjustments to services / utilities, etc).</li> </ul> <p>Note – for work where heritage, threatened species, populations or endangered ecological communities would be affected, that work is classified as construction, unless otherwise approved by the <b>Secretary</b> in consultation with the Office of Environment and Heritage.</p> |
| Council                 | Wellington Council.  |
| Decommissioning         | The removal of wind turbines and any associated above ground infrastructure.   |
| Department              | Department of Planning and Environment.  |
| DPI                     | Department of Primary Industries.  |
| DPI – Water             | Department of Primary Industries – Water.  |
| Dust                    | Any solid material that may become suspended in air or deposited.  |
| EA                      | <i>Bodangora Wind Farm Environmental Assessment</i> (Bodangora Wind Farm Pty Ltd, May 2012) as amended by: <ul style="list-style-type: none"> <li>• <i>Preferred Project Report</i> (Bodangora Wind Farm Pty Ltd, February 2013) and <i>Submissions Response Report</i> (Bodangora Wind Farm Pty Ltd, February 2013); and</li> <li>• Modification Application MOD 1 dated 1 September 2015 and accompanying Environmental Assessment</li> </ul>  |
| EEC                     | Endangered ecological community listed under the <i>Threatened Species Conservation Act 1995</i> .   |
| EPA                     | Environment Protection Authority.  |
| EPL                     | Environment Protection Licence under the <i>Protection of the Environment Operations Act 1997</i> .  |
| Feasible and Reasonable | Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the   |



|                                    |  |
|------------------------------------|--|
|                                    | <p>application of judgement in arriving at a decision, taking into account mitigation benefits and cost of mitigation versus benefits provided, community views and nature and extent of potential improvements.</p> <p>Where requested by the <b>Secretary</b>, the Proponent shall provide evidence as to how feasible and reasonable measures were considered and taken into account.</p> |
| Heritage                           | Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement such as a shared associations in pastoral landscapes as well as associations linked with the mission period.  |
| Heritage Item                      | An item as defined under the <i>Heritage Act 1977</i> , and assessed as being of local, State and / or National heritage significance, and / or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i> .  |
| Micro-siting                       | Means a location allowance of 100 metres radius for Project components as long as impacts remain consistent with that assessed.  |
| <b>Minister</b>                    | <b>Minister for Planning.</b>  |
| <b>Non-associated residence</b>    | <b>Any residence on privately-owned land where the landowner has not reached a financial or in kind agreement with the Proponent in relation to the project.</b>   |
| OEH                                | Office of Environment and Heritage.  |
| <b>OOHW</b>                        | <b>Out-of-hours work.</b>  |
| Operation                          | Means the operation of the Project, but does not include commissioning trials of equipment or temporary use of parts of the Project during construction.   |
| Project                            | The Project that is approved by this Project Approval and as generally described in Schedule A.  |
| Proponent                          | Bodangora Wind Farm Pty Ltd.   |
| Publicly available                 | Available for inspection by a member of the general public (for example available on an internet website).   |
| Registered Aboriginal Stakeholders | Aboriginal stakeholders identified as registered stakeholders in the EA.   |
| RFS                                | NSW Rural Fire Service.  |
| <b>Secretary</b>                   | <b>Secretary for the Department, or nominee.</b>   |
| Sensitive receiver                 | Residence, education institution (e.g. school, university, TAFE college), health care facility (e.g. nursing home, hospital), religious facility (e.g. church) and children's day care facility.   |
| Shut-down period                   | The period during which a turbine is being taken out of service from normal operation to inactivity.   |
| Site                               | Land to which Major Project Application MP 10_0157 applies.  |

## **SCHEDULE B – ADMINISTRATIVE CONDITIONS**

### **TERMS OF APPROVAL**

- B1. The Proponent shall carry out the Project:
- (a) generally in accordance with the EA; and
  - (b) in accordance with the conditions of this approval.

*Note: The general layout of the project is depicted in the figure in Appendix 1.*

- B2. In the event of an inconsistency between the documents referred to in condition B1, the most recent document shall prevail to the extent of any inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
- B3. The Proponent shall comply with any reasonable requirement(s) of the **Secretary** arising from the Department's assessment of:
- (a) any reports, plans or correspondence that are submitted in accordance with this Approval; and
  - (b) the implementation of any actions or measures contained within these reports, plans or correspondence.
- B4. Subject to confidentiality, the Proponent shall make all documents required under this Approval available for public inspection on request.

### **LIMITS OF APPROVAL**

- B5. This Approval lapses 5 years after the date of this Approval unless the Proponent has confirmed to the satisfaction of the **Secretary** that orders have been placed for wind turbines, or demonstrated that work subject of this Approval has been completed on the Site before the date on which the Approval would otherwise lapse under this condition. Work, for the purpose of this condition includes at least one of the following:
- (a) internal track construction;
  - (b) civil works associated with the construction of the foundations for the wind turbine footings;
  - (c) control room construction;
  - (d) electrical substation construction;
  - (e) underground cabling; or
  - (f) internal overhead transmission line construction.
- B6. The Project shall not exceed 33 wind turbines.
- B7. Prior to the commencement of construction, the Proponent shall provide written evidence to the satisfaction of the **Secretary** that the lease agreements with the site landowners have adequate provisions to require that decommissioning occurs in accordance with this Approval, and is the responsibility of the Proponent.
- B8. If any wind turbine is not used for the generation of electricity for a continuous period of 12 months, it shall be decommissioned by the Proponent, unless otherwise agreed by the **Secretary**. The Proponent shall keep independently-verified annual records of the use of wind turbines for electricity generation. Copies of these records shall be provided to the **Secretary** upon request. The relevant wind turbine and any associated infrastructure is to be dismantled and removed from the site by the Proponent within 18 months from the date that the wind turbine was last used to generate electricity.



## STATUTORY REQUIREMENTS

- B9. The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the Project. No condition of this approval removes the obligation of the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on the site at all times during the Project.
- B10. For the purpose of section 75S(2)(b) of the EP&A Act, the *relevant provisions*, as defined in section 75S(1A) of the EP&A Act, apply to this approval.

## STAGING

- B11. The Proponent may elect to construct and / or operate the Project in stages. Where staging is proposed, the Proponent shall submit a Staging Report to the **Secretary** prior to the commencement of the first proposed stage. The Staging Report shall provide details of:
- (a) how the Project would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and
  - (b) details of the relevant Conditions of Approval, which would apply to each stage and how these shall be complied with across and between the stages of the Project.

Where staging of the Project is proposed, these Conditions of Approval are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s). However, nothing in this allows submission of the Bird and Bat Adaptive Management Program, as required by condition C6, to be staged.

The Proponent shall ensure that an updated Staging Report (or advice that no changes to staging are proposed) is submitted to the **Secretary** prior to the commencement of each stage, identifying any changes to the proposed staging or applicable conditions.

- B12. The Proponent shall ensure that all plans, sub-plans and other management documents required by the conditions of this Approval and relevant to each stage (as identified in the Staging Report) are submitted to the **Secretary** no later than one month prior to the commencement of the relevant stages, unless otherwise agreed by the **Secretary**.

*Note: These conditions do not relate to staged development within the meaning of section 83B.*

## COMPLIANCE

- B13. The Proponent shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this Approval relevant to their respective activities.
- B14. The Proponent shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.
- B15. In the event of a dispute between the Proponent and a public authority, in relation to an applicable requirement in this Approval or relevant matter relating to the Project, either party may refer the matter to the **Secretary** for resolution. The **Secretary's** determination of any such dispute shall be final and binding on the parties.

## PLANNING AGREEMENT

- B16. The Proponent shall implement the Planning Agreement entered into with Wellington Council, dated 12 March 2012 (or as updated), unless otherwise agreed by Wellington

Council. The contributions shall be consistent with the general terms of agreement between Council and the Proponent, including:

- (a) development contributions towards a community benefit fund, road maintenance, and Project related Council Administration; and
- (b) agreed arrangements regarding the Traffic Study to be undertaken and the consequential road upgrade works, at the expense of the Proponent.



## **SCHEDULE C – ENVIRONMENTAL PERFORMANCE**

### **BIODIVERSITY**

#### **Clearing**

- C1. The clearing of all native vegetation shall be limited to the minimal extent practicably required as detailed in the Construction Flora and Fauna Management Plan, and no more than 1.32 hectares is to be cleared, unless otherwise agreed by the **Secretary**. All feasible and reasonable measures shall be undertaken to avoid the clearing of any threatened flora species or habitat for threatened fauna species. Details regarding the procedures for clearing vegetation and minimising the extent of clearing shall be clearly included in the Construction Flora and Fauna Management Plan as required by condition E21(f).
- C2. Tree trunks and major branches from cleared trees should be used, to the fullest extent practicable, to enhance habitat (coarse woody debris) in rehabilitated areas or in derived native grassland (either in offset areas or areas adjoining impacted areas) and details included in the Construction Flora and Fauna Management Plan required by condition E21(f).

#### **Detailed Design & Micro-Siting**

- C3. All feasible and reasonable effort shall be made to locate wind turbines at least 30 metres from adjacent hollow-bearing trees which have the potential to provide roost or nesting habitat for bird and bat species identified to be at risk of rotor collision during turbine operation.
- C4. Where micro-siting is proposed, the Proponent shall identify the proposed turbine locations in the CEMP, and demonstrate how those locations will not give rise to increased landscape, vegetation, cultural heritage, visual amenity, shadow flicker, noise, fire risk or aviation impacts when compared with the approved locations.
- C5. All feasible and reasonable effort shall be made to avoid native vegetation disturbance (including clearing of hollow bearing trees) during micro-siting and construction of the Project so as to reduce as far as possible the extent of vegetation disturbance required for the Project.

#### **Bird and Bat Monitoring and Management**

- C6. Prior to the commencement of construction, the Proponent shall prepare and submit for the approval of the **Secretary** a **Bird and Bat Adaptive Management Program**, which takes into account bird / bat monitoring methods identified in the current editions of *AusWEA Best Practice Guidelines for the Implementation of Wind Energy Projects in Australia* and *Wind Farm and Birds: Interim Standards for Risk Assessment*. The Program shall be prepared **in consultation with OEHS** and implemented by a suitably qualified expert, approved by the **Secretary**. The Program shall incorporate Monitoring, and a Decision Matrix that clearly sets out how the Proponent will respond to the outcomes of monitoring. It shall:
  - (a) incorporate an ongoing role for the suitably qualified expert;
  - (b) set out monitoring requirements in order to assess the impact of the Project on bird and bat populations, including details on survey locations, parameters to be measured, frequency of surveys and analyses and reporting. The monitoring program shall be capable of detecting any changes to the population of birds and / or bats that can reasonably be attributed to the operation of the Project, that is, data may be required to be collected prior to the commencement of construction;



- (c) incorporate a decision making framework that sets out specific actions and when they may be required to be implemented to reduce any impacts on bird and bat populations that have been identified as a result of the monitoring;
- (d) identify 'at risk' bird and bat groups, seasons, and / or areas within the Project site which may attract high levels of mortality and include monthly mortality assessments and periodic local population census' and bird utilisation surveys;
- (e) identify potential mitigation measures and implementation strategies in order to reduce impacts on birds and bats such as minimising the availability of raptor perches, swift carcass removal, pest control including rabbits, use of deterrents, and sector management including switching off turbines that are predicted to or have had an unacceptable impact on bird / bat mortality at certain times; and
- (f) identify matters to be addressed in periodic reports in relation to the outcomes of monitoring, the application of the decision making framework, the mitigation measures identified, progress with the implementation of such measures, and their success.

The Reports referred to under part (f) shall be submitted to the **Secretary** and OEH on an annual basis for the first five years of operation and every two years thereafter (unless otherwise agreed to by the **Secretary**), and shall be prepared within two months of the end of the reporting period. The **Secretary** may, at the request of the Proponent at anytime, vary the reporting requirement or period by notice in writing to the Proponent.

The Proponent is required to implement feasible and reasonable mitigation measures as identified under part (e) where the need for further action is identified through the Bird and Bat Adaptive Management Program, or as otherwise agreed with the **Secretary**.

### **Biodiversity Offset Package**

- C7. Following final design, and prior to commencement of construction in areas requiring native vegetation clearing, or as otherwise agreed to by the **Secretary**, the Proponent shall develop and submit a Biodiversity Offset Package for the approval of the **Secretary**. The Package shall detail how the ecological values lost as a result of the Project will be offset. The Biodiversity Offset Package shall be developed in consultation with the OEH and shall (unless otherwise agreed by the **Secretary**) include, but not necessarily be limited to:
- (a) the identification of the extent and types of habitat that would be lost or degraded as a result of the final design of the Project;
  - (b) the objectives and biodiversity outcomes to be achieved (including 'improve or maintain' biodiversity values), and the adequacy of the proposed offset considered;
  - (c) the final suite of the biodiversity offset measures selected and secured, including but not necessarily limited to:
    - i. an offset proposal which is supported by a suitable metric method (such as the Biobanking Assessment Methodology);
    - ii. details of the relative condition and values of communities on the offset site in comparison to those to be impacted, including all areas of derived native grassland in moderate to good condition; and
    - iii. proposed management actions and expected gains;
  - (d) the monitoring requirements for compensatory habitat works and other biodiversity offset measures proposed to ensure the outcomes of the package are achieved, including:
    - i. the monitoring of the condition of species and ecological communities at offset locations;
    - ii. the methodology for the monitoring program(s), including the number and location of offset monitoring sites, and the sampling frequency at these sites; and



- iii. provisions for the annual reporting of the monitoring results for a set period of time as determined in consultation with the OEH;
- (e) timing and responsibilities for the implementation of the provisions of the Package;
- (f) evidence that the offset(s) has been acquired and / or is permanent and secure prior to the commencement of construction;
- (g) how securing the site addresses the residual impacts of the action on threatened species;
- (h) proposed long term funding for management actions as well as roles and responsibilities; and
- (i) key milestones, performance indicators, corrective actions and timeframes for the completion of all actions outlined in the Package.

Land offsets shall be consistent with the Principles for the use of Biodiversity Offsets in NSW (OEH, 2011) and the Environmental Protection and Biodiversity Conservation Act 1999 – Environmental Offset Policy. Any land offset shall be enduring and be secured by a conservation mechanism which protects and manages the land in perpetuity. Where land offsets cannot solely achieve compensation for the loss of habitat, additional measures shall be provided to collectively deliver an improved or maintained biodiversity outcome for the region.

Where monitoring indicates that biodiversity outcomes are not being achieved, feasible and reasonable remedial actions shall be undertaken to ensure that the objectives of the Biodiversity Offset Package are achieved.

## **WATER QUALITY AND HYDROLOGY**

- C8. Except as may be provided by an EPL, the Project shall be constructed and operated to comply with section 120 of the *Protection of the Environment Operations Act 1997*, which prohibits the pollution of waters.
- C9. Waterway crossings shall be designed and constructed in consultation with **DPI - Water** and DPI (Fisheries) and consistent with DPI (Fisheries) guidelines, *Policy and Guidelines for Fish Friendly Waterway Crossings* (2004) and *Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (2004).

## **NOISE**

- C10. Any overhead transmission line associated with the Project shall be designed, constructed and operated to minimise the generation of corona and aeolian noise as far as feasible and reasonable at nearest existing **non-associated residences**.

## **HAZARDS AND RISK**

- C11. Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled strictly in accordance with:
  - (a) all relevant Australian Standards;
  - (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
  - (c) the *Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin* (Environment Protection Authority, 1997).

In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

## **Aviation Obstacles and Hazards**

C12. Prior to the commencement of construction, the Proponent shall consult with:

- (a) aerodrome operators that have an aerodrome located within 30 kilometres of the boundaries of the site, to determine any impact on Obstacle Limitation Surfaces at such aerodromes;
- (b) AirServices Australia, to determine potential impacts on instrument approach procedures at aerodromes, navigational aids, communications and surveillance facilities; and
- (c) Aerial Agriculture Association Australia, to determine potential hazards to aerial application and related operations.

Feasible and reasonable mitigation measures for each of the potential impacts and hazards identified, shall be determined in consultation with the respective groups identified in this condition, prior to the commencement of construction.

C13. Prior to the commencement of construction, the Proponent shall provide the following information to the Civil Aviation Safety Authority, Airservices Australia, Royal Australian Air Force - Aeronautical Information Services, the Aerial Agricultural Association of Australia, as well as all known users of privately owned local airfields:

- (a) "as constructed" coordinates in latitude and longitude of each wind turbine generator;
- (b) final height of each wind turbine generator in Australian Height Datum; and
- (c) ground level at the base of each wind turbine generator in Australian Height Datum.

C14. Should increases to the costs of aerial agricultural spraying on any non-associated property surrounding the site be attributable to the operation of the Project, the Proponent shall fully fund to the affected landowner, the reasonable cost difference between pre-construction aerial agricultural spraying and the increased cost, as agreed between the relevant parties.

## **Radio Communication**

C15. Prior to the commencement of construction, the Proponent shall:

- (a) consult with the NSW Government Telecommunications Authority and other registered communications licensees (including emergency services) to ensure that risks to these services are minimised as far as feasible and reasonable. This may include the installation of additional radio sites or services to ensure coverage of radio communications are not degraded;
- (b) in the event that any disruptions to radio communication service links (installed before construction of the Project) arise as a result of the Project, the Proponent shall undertake appropriate remedial measures in consultation with the NSW Government Telecommunications Authority and relevant licensee to rectify any issue, including arranging the deployment of temporary measures in order to maintain effective coverage whilst more permanent measures are effected, within three months of the problem being identified, and at the expense of the Proponent;
- (c) consider remedial measures, including:
  - i. modification to or relocation of the existing antennae;
  - ii. installation and maintenance of additional radio sites or services;
  - iii. installation of a directional antennae; and / or
  - iv. installation of an amplifier to boost the signal strength.



## **Bushfire Risk**

- C16. The Proponent shall ensure that all Project components on site are designed, constructed and operated to minimise ignition risks, provide for asset protection consistent with relevant RFS design guidelines (*Planning for Bushfire Protection 2006* and *Standards for Asset Protection*) and provide for necessary emergency management including appropriate fire-fighting equipment and water supplies on site to respond to a bush fire.
- C17. Throughout the operational life of the Project, the Proponent shall regularly consult with the local RFS about details of the Project, including the construction timetable and the final location of all infrastructure on the site. The Proponent shall comply with any reasonable request of the local RFS to reduce the risk of bushfire and to enable fast access in emergencies.

## **VISUAL AMENITY**

### **Views**

- C18. All non-associated receptor's whose dwelling may be subject to moderate to high visual impact, as defined in the EA, shall be consulted regarding impact minimisation measures. The outcomes of this consultation process shall be used to inform the Design and Landscape Plan, required under condition C26.
- C19. At the request of any owners of non-associated residential dwellings with views of a turbine(s) located within five kilometres of their dwellings, the Proponent shall provide and bear the full cost of reasonable landscaping treatments to visually screen these dwellings. Such a request may be made in writing by the owner of the dwelling within six months from the commencement of operation of the Project, and landscaping treatments agreed between the parties shall be implemented and completed within 12 months of such an agreement. Should the parties not be able to reach agreement on the scope of landscaping treatments, then either party may refer the matter to the **Secretary** for resolution. The **Secretary's** decision on such a referral shall be final and binding on the parties.
- C20. Landscaping works to reduce the visual impact of the Project shall generally comprise of indigenous and locally occurring species.

### **Turbine and Associated Infrastructure External Design**

- C21. The Proponent shall maximise the use of building materials and treatments for associated infrastructure which visually complement the surrounding environment.
- C22. The turbines shall be painted matt off-white / grey. The blades shall be finished with a surface treatment that minimises any potential for glare or reflection. No advertising, signs or logos shall be mounted on the turbines, except where required for safety purposes.

### **Shadow Flicker**

- C23. Shadow flicker from the Project must not exceed 30 hours / annum at any residence not associated with the Project.

### **Substation**

- C24. The substation and associated facility site shall be designed and constructed to minimise visual intrusion to the nearest sensitive receivers as far as feasible and reasonable including appropriate external finishes to minimise glare or reflection, landscape planting to screen views and external lighting requirements in accordance with condition C25.

## Night Lighting

C25. With the exception of aviation hazard lighting implemented in accordance with the requirements of this condition, no external lighting other than low intensity security night lighting is permitted on site unless otherwise agreed or directed by the **Secretary**, or required by Civil Aviation Safety Authority.

Prior to the commencement of construction, the Proponent shall consult with the Civil Aviation Safety Authority on the need for aviation hazard lighting in relation to the wind turbines. Any aviation hazard lighting shall be implemented in a manner that minimises visual intrusion to surrounding **non-associated residences** as far as feasible and reasonable.

## Design and Landscape Plan

C26. A **Design and Landscaping Plan** shall be prepared to outline measures to ensure appropriate development and maintenance of landscaping on the site to achieve adequate landscape buffers and address the visual impacts arising from the Project, including turbines, site access roads and associated above ground infrastructure, as far as is feasible and reasonable.

The Plan shall be prepared by a qualified landscape architect and where relevant meet any requirements of Council. The Plan shall include design treatments for the turbines and ancillary infrastructure, including, but not necessarily limited to:

- (a) the landscape screening measures at non-associated residences in close proximity to the Project site and along nearby roadsides to screen potential moderate to significant views of the Project, including an outline of additional measures available for requested landscaping treatments;
- (b) landscape elements and built elements, including proposed treatments, finishes and materials of exposed surfaces (including colour specifications);
- (c) lighting;
- (d) a schedule of species to be used in landscaping;
- (e) details of the timing and progressive implementation of landscape works; and
- (f) procedures and methods to monitor and maintain landscaped areas.

The Plan shall be submitted for the approval of the **Secretary** prior to the commencement of permanent built works and / or landscaping, unless otherwise agreed by the **Secretary**. The Plan may be submitted in stages to suit the staged construction program of the Project.

## UTILITIES AND SERVICES

C27. Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and / or support. Consultation with the relevant owner and / or provider of services that are likely to be affected by the Project shall be undertaken to make suitable arrangements for access to, diversion, protection, and / or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Proponent.

## WASTE MANAGEMENT

C28. The Proponent shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.



- C29. The Proponent shall maximise the reuse and / or recycling of waste materials generated on site by the Project, to minimise the need for treatment or disposal of those materials outside the site.
- C30. The Proponent shall ensure that no green waste associated with the Project is burnt on site during the life of the Project.
- C31. The Proponent shall ensure that all liquid and / or non-liquid waste generated on the site is assessed and classified in accordance with *Waste Classification Guidelines* (DECC, 2008), or any future guideline that may supersede that document, and where removed from the site is only directed to a waste management facility lawfully permitted to accept the materials.

## **PROPERTY IMPACTS**

### **Crown Land**

- C32. Prior to the commencement of construction of the Project, the Proponent shall consult with and comply with the requirements of the Department of Lands – Crown Land Division in relation to any Crown land affected by the Project to enable the lawful use of that land by the Project.
- C33. Prior to the commencement of construction of the Project, the Proponent shall, with the agreement of Council, assume full maintenance responsibility for any Crown road reserves associated with the Project which are identified as requiring dedication to Council during the life of the Project. The Proponent shall retain full maintenance responsibility for any such road(s) for the duration of their dedication to Council during the life of the Project.

### **Trigonometric Reserves**

- C34. Disturbance to Trigonometric Reserves shall be avoided during the life of the Project, unless otherwise approved by the Surveyor General and the relevant licence under the *Crown Lands Act 1989* is obtained by the Proponent.

### **Mineral Resources**

- C35. Prior to the commencement of relevant construction works, the Proponent shall consult with the Department of Trade & Investment, Regional Infrastructure & Services (Mineral Resources section) and holders of mineral, mining and exploration titles or tenements, with respect to measures to be applied during construction and operation of the Project so as to minimise the potential for any sterilisation of resources on the tenement.

## **SCHEDULE D –** **COMMUNITY INFORMATION, REPORTING AND AUDITING**

### **COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT**

#### **Community Consultative Committee**

- D1. The Proponent shall continue operation of the **Community Consultative Committee** for the life of the Project, unless otherwise agreed by the **Secretary**. The Proponent shall ensure the Committee is in operation prior to commencement of construction, and operate in a manner consistent with the requirements of *Appendix C: Guidelines for wind farm consultative committees*, as contained in the *draft NSW Planning Guidelines – Wind Farms* (December 2011), as updated, unless otherwise directed by the **Secretary**.

#### **Complaints and Enquiries Procedure**

- D2. Prior to the commencement of construction, or as otherwise agreed by the **Secretary**, the Proponent shall ensure that the following are available for community enquiries and complaints for the life of the Project (including construction and operation) or as otherwise agreed by the **Secretary**:
- (a) a 24 hour telephone number(s) on which complaints and enquiries about the Project may be registered;
  - (b) a postal address to which written complaints and enquires may be sent;
  - (c) an email address to which electronic complaints and enquiries may be transmitted; and
  - (d) a complaints management and mediation system for complaints unable to be resolved.

The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this Approval.

- D3. Prior to the commencement of construction, or as otherwise agreed by the **Secretary**, the Proponent shall prepare and implement a **Complaints Management System** consistent with *AS 4269: Complaints Handling* and maintain the System for the life of the Project.

Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained in a complaints register and included in the construction compliance reports required by this Approval. The information contained within the System shall be made available to the **Secretary** on request.

#### **Provision of Electronic Information**

- D4. Prior to the commencement of construction, or as otherwise agreed by the **Secretary**, the Proponent shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the Project, for the life of the Project. The Proponent shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to:
- (a) information on the current implementation status of the Project;
  - (b) a copy of the documents referred to under condition B1 of this Approval, and any documentation supporting modifications to this Approval that may be granted;
  - (c) a copy of this Approval and any future modification to this Approval;



- (d) a copy of each relevant environmental approval / consent, licence or permit required and obtained in relation to the Project;
- (e) a copy of each current strategy, plan, program or other document required under this Approval;
- (f) the outcomes of compliance tracking in accordance with condition D5 of this Approval; and
- (g) details of contact point(s) to which community complaints and enquiries may be directed, including a telephone number, a postal address and an email address.

## COMPLIANCE MONITORING AND TRACKING

### Compliance Tracking Program

- D5. The Proponent shall develop and implement a **Compliance Tracking Program** to track compliance with the requirements of this Approval. The Program shall be submitted to the **Secretary** for approval prior to the commencement of construction and operate for the life of the Project. The Program shall include, but not necessarily be limited to:
- (a) provisions for the notification of the **Secretary** prior to the commencement of construction and prior to the commencement of operation of the Project (including prior to each stage, where works are being staged);
  - (b) provisions for periodic review of the compliance status of the Project against the requirements of this Approval;
  - (c) provisions for periodic reporting of compliance status to the **Secretary**, including a Pre-Construction Compliance Report, during construction reporting, and a Pre-Operation Compliance Report;
  - (d) a program for independent environmental auditing in accordance with *ISO 19011:2003 - Guidelines for Quality and / or Environmental Management Systems Auditing*;
  - (e) mechanisms for recording environmental incidents during construction, and actions taken in response to those incidents;
  - (f) provisions for reporting environmental incidents to the **Secretary** and relevant public authorities (including Wellington Council) during construction and for the life of the Project;
  - (g) procedures for rectifying any non-compliance identified during environmental auditing, and review of compliance or incident management; and
  - (h) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this Approval relevant to their respective activities.

### Incident Reporting

- D6. The Proponent shall notify the **Secretary** within 24 hours of becoming aware of the incident of any incident with actual or potential significant off-site impacts on people or the biophysical environment. The Proponent shall provide full written details of the incident to the **Secretary** within seven days of the date on which the incident occurred.
- D7. The Proponent shall meet the requirements of the **Secretary** to address the cause(s) or impact of any incident, as it relates to this Approval, reported in accordance with condition D6 of this Approval, within such period as the **Secretary** may require.

## OPERATIONAL PERFORMANCE

- D8. Within fifteen months of the completion of construction, and at any other time required by the **Secretary**, the Proponent shall commission an independent qualified person or team to undertake an **Operational Performance Audit** of the Project. The independent person or team shall be approved by the **Secretary** prior to the commencement of the Audit. The Operational Performance Audit Report shall be submitted to the **Secretary**

within one month of the completion of the Audit, unless otherwise agreed by the **Secretary**. The Audit shall:

- (a) assess compliance with the requirements of this Approval, and other licences and approvals that apply to the Project;
- (b) assess the operational performance of the Project against the aims and objectives for the Project specified in the documents referred to under condition B1 of this Approval;
- (c) assess the environmental performance of the Project against the predictions made and conclusions drawn in the documents referred to under condition B1 of this Approval; and
- (d) review the effectiveness of the environmental management of the Project, including any environmental impact mitigation works.

The Operational Performance Audit shall be made publicly available on the website (in accordance with condition D4), and a copy provided to Wellington Council within two months of completion.

**D9. Within 3 years of the commencement of the operation of the project, or within 3 months of the submission of an:**

- (a) incident report under condition D6;**
- (b) audit under condition D8; or**
- (c) any modification to the conditions of this approval,**

**the Proponent shall review, and if necessary revise, the strategies, plans and programs required under this approval to the satisfaction of the Secretary.**

*Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.*



## **SCHEDULE E – CONSTRUCTION ENVIRONMENTAL MANAGEMENT**

### **DUST GENERATION**

- E1. The Project shall be constructed in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust and tracking of material onto public roads. All Project related activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all feasible and reasonable dust mitigation measures, including cessation of relevant works as appropriate such that emissions of visible dust cease.

### **HERITAGE**

- E2. In undertaking the Project, impacts to heritage, shall to the greatest extent practicable, be avoided and minimised. In particular:
- (a) clearly identify and avoid the stone procurement artefact area (SU18/L1), and the Kaiser Mine, and include methods for restricting access to these sites as part of the Construction Heritage Management Plan required by condition E21(e); and
  - (b) where impacts as assessed in the EA are unavoidable, works shall be undertaken in accordance with the strategy outlined in the Construction Heritage Management Plan required by condition E21(e).
- E3. Clearly identify the level of construction vehicles required to use the Sandy Hollow to Maryvale Railway line, and the ability of the existing road to accommodate heavy vehicles. Should widening or other enhancements be required to safely accommodate heavy vehicles, a Statement of Heritage Impact is required in accordance with relevant Heritage Council guidelines, in consultation with the Heritage Branch of the OEH, and to the satisfaction of the **Secretary**.

### **NOISE AND VIBRATION**

#### **Construction or Decommissioning Hours**

- E4. The Proponent shall only undertake construction or decommissioning activities between:
- (a) 7:00am to 6:00pm Mondays to Fridays;
  - (b) 8:00am to 1:00pm Saturdays; and
  - (c) at no time on Sundays or NSW public holidays.

The following construction activities may be undertaken outside these hours:

- activities that are inaudible at any non-associated residence;
- activities approved under an out-of-hours (OOHW) work protocol (see condition E21(b)(vi));
- the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or
- emergency work to avoid the loss of lives, property and/or prevent environmental harm.

E5. Deleted

E6. Deleted

## Construction Noise and Vibration

- E7. The Proponent shall only carry out blasting on site between 9am and 5pm Monday to Friday and 9am to 1pm Saturday. No blasting is allowed on Sundays or NSW public holidays.
- E8. The Proponent shall ensure that any blasting carried out during construction of the project does not exceed the criteria in Table 1.

**Table 1 – Blasting criteria**

| <b>Location</b>                   | <b>Airblast overpressure<br/>(dB(Lin Peak))</b> | <b>Ground vibration<br/>(mm/s)</b> | <b>Allowable exceedance</b>                         |
|-----------------------------------|---|------------------------------------|---|
| Residence on privately-owned land | 120   | 10                                 | 0%  |
|                                   | 115   | 5                                  | 5% of total number of blasts over a 12 month period |

E9. Deleted.

E10. Deleted.

## PROPERTY IMPACTS

- E11. Access to private property shall be maintained during construction unless otherwise agreed with the affected property owner in advance. Access that is physically affected by the Project shall be reinstated by the Proponent to at least an equivalent standard, in consultation with the affected property owner.
- E12. Any damage caused to property as a result of the Project shall be rectified or the property owner compensated, within a reasonable timeframe, with the costs borne by the Proponent.

## SOIL, WATER QUALITY AND HYDROLOGY

- E13. Soil and water management measures consistent with *Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4th Edition* (Landcom, 2004) shall be employed during the construction of the Project to minimise soil erosion and the discharge of sediment and other pollutants to land and / or waters.
- E14. Where available, and of appropriate chemical and biological quality, stormwater, recycled water or other water sources shall be used in preference to potable water for construction activities, including concrete mixing and dust control.
- E15. Construction activities within 40 metres of any watercourses, shall be consistent with the *Controlled Activity Guidelines* (Department of Water and Energy, 2008) including, but not limited to, 'In-stream Works', 'Outlet Structures', 'Riparian Corridors', 'Vegetation Management Plans', and 'Watercourse Crossings', or any guidelines which supersede these documents.

## TRAFFIC AND TRANSPORT

- E16. Unless otherwise agreed by the **Secretary**, the Proponent shall commission an independent, qualified person or team to undertake the following in consultation with the relevant road authority:
- (a) prior to the commencement of construction, review the proposed route and existing access provisions to the Wind Farm site to determine whether the route and existing provisions allow for safe access of construction and operational vehicles



associated with the Project (including appropriate site distances and provisions for over-mass or over-dimensional transport and safety with other road users). Where improvements or changes to the proposed route are required, the Proponent shall implement these in consultation with the relevant road authority, prior to the commencement of construction and at the full expense of the Proponent; and

- (b) assess all roads proposed to be used for over-mass and / or over-dimensional transport (including intersections, bridges, culverts and other road features) prior to the commencement of construction to determine whether the existing road condition can accommodate the proposed over-mass and / or over-dimensional haulage. Where improvements are required, the Proponent shall implement these in consultation with the relevant road authority, prior to the commencement of construction and at the full expense of the Proponent.

Upon determining the haulage route(s) for construction vehicles associated with the Project, and prior to construction, undertake a **Road Dilapidation Report**. The Report shall assess the current condition of the road(s) and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the Project. The Report shall be submitted to the relevant road authority for review prior to the commencement of haulage.

Within three months of completion of construction, a subsequent Report shall be prepared to assess any damage that may have resulted from the construction of the Project (including mechanisms to restore any damage) and submitted to relevant road authority for review.

Measures undertaken to restore or reinstate roads affected by the Project shall be undertaken in accordance with the reasonable requirements of the relevant road authority (including timing requirements), and at the full expense of the Proponent.

## ANCILLARY FACILITIES

E17. Unless otherwise approved by the **Secretary**, the location of Ancillary Facilities shall:

- (a) be located more than 50 metres from a waterway;
- (b) be located within or adjacent to the Project;
- (c) have ready access to the road network;
- (d) be located to minimise the need for heavy vehicles to travel through residential areas;
- (e) be sited on relatively level land;
- (f) be separated from nearest residences by at least 200 metres;
- (g) not require vegetation clearing beyond that already required by the Project;
- (h) not impact on heritage sites (including areas of archaeological sensitivity) beyond those already impacted by the Project;
- (i) not unreasonably affect the land use of adjacent properties;
- (j) be above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented; and
- (k) provide sufficient area for the storage of raw materials to minimise, to the greatest extent practical, the number of deliveries required outside standard construction hours.

The location of the Ancillary Facilities shall be identified in the Construction Environmental Management Plan required under condition E20 and include consideration of the above criteria. Where the above criteria cannot be met for any proposed Ancillary Facility, the Proponent shall demonstrate to the satisfaction of the **Secretary** that there will be no significant adverse impact from that facility's



construction or operation. Such assessment(s) can be submitted separately or as part of the Construction Environmental Management Plan.

- E18. All construction ancillary facility sites shall be rehabilitated to at least their pre-construction condition, unless otherwise agreed by the affected landowner.

## ENVIRONMENTAL REPRESENTATIVE

- E19. Prior to the commencement of construction of the Project, or as otherwise agreed by the **Secretary**, the Proponent shall nominate for the approval of the **Secretary** a suitably qualified and experienced Environment Representative(s) that is independent of the design and construction personnel. The Proponent shall employ the Environment Representative(s) for the duration of construction and operation, or as otherwise agreed by the **Secretary**. The Environment Representative(s) shall:

- (a) be the principal point of advice in relation to the environmental performance of the Project;
- (b) monitor the implementation of environmental management plans and monitoring programs required under this Approval and advise the Proponent upon the achievement of these plans / programs;
- (c) have responsibility for considering and advising the Proponent on matters specified in the conditions of this Approval, and other licences and approvals related to the environmental performance and impacts of the Project;
- (d) ensure that environmental auditing is undertaken in accordance with the Proponent's Environmental Management System(s);
- (e) be given the authority to approve / reject minor amendments to the Construction Environment Management Plan. What constitutes a "minor" amendment shall be clearly explained in the Construction Environmental Management Plan required under condition E20;
- (f) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur; and
- (g) be consulted in responding to the community concerning the environmental performance of the Project where the resolution of points of conflict between the Proponent and the community is required.

## CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- E20. Prior to the commencement of construction, or as otherwise agreed by the **Secretary**, the Proponent shall prepare and implement (following approval) a **Construction Environmental Management Plan** for the Project. The Plan shall outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant government agencies (including Wellington Council), and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:

- (a) a description of activities to be undertaken during construction of the Project (including staging and scheduling);
- (b) statutory and other obligations that the Proponent is required to fulfil during construction, including approvals / consents, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
- (c) a description of the roles and responsibilities for relevant employees involved in the construction of the Project, including relevant training and induction provisions for



ensuring that employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these Conditions of Approval;

- (d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase; and
- (e) details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the Project). In particular, the following environmental performance issues shall be addressed in the Plan:
  - i. compounds and ancillary facilities management;
  - ii. noise and vibration;
  - iii. traffic and access;
  - iv. soil and water quality and spoil management;
  - v. air quality and dust management;
  - vi. management of Aboriginal and non-Aboriginal heritage;
  - vii. soil contamination, hazardous material and waste management;
  - viii. management of ecological impacts; and
  - ix. hazard and risk management.

The Plan shall be submitted for the approval of the **Secretary** no later than one month prior to the commencement of construction, or as otherwise agreed by the **Secretary**. The Plan may be prepared in stages, however, construction works for each stage shall not commence until written approval has been received from the **Secretary**.

The approval of a Construction Environmental Management Plan does not relieve the Proponent of any requirement associated with this Approval. If there is an inconsistency with an approved Construction Environmental Management Plan and the conditions of this Approval, the requirements of this Approval prevail.

E21. As part of the Construction Environmental Management Plan for the Project required under condition E20 the Proponent shall prepare and implement:

- (a) a **Construction Compound and Ancillary Facilities Management Plan** to detail the management of construction ancillary facilities associated with the Project. The Plan shall include but not be limited to:
  - i. a description of the facility, its components and the surrounding environment;
  - ii. details of the activities to be carried out at each facility, including the hours of use and the storage of dangerous and hazardous goods;
  - iii. an assessment against the locational criteria outlined in condition E17;
  - iv. details of the mitigation and management procedures specific to the facility that would be implemented to minimise environmental and amenity impacts, and an assessment of the adequacy of the mitigation or offsetting measures;
  - v. identification of the timing for the completion of activities at the facility and how the site will be decommissioned (including any necessary rehabilitation); and
  - vi. mechanisms for the monitoring, review and amendment of this Plan.
- (b) a **Construction Noise and Vibration Management Plan** to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall be consistent with the guidelines contained in the *Interim Construction Noise Guidelines* (DECC, 2009) and shall include, but not be limited to:
  - i. identification of sensitive receivers and relevant construction noise and vibration goals applicable to the Project stipulated in this approval;



- ii. details of construction activities and an indicative schedule for construction works, including the identification of key noise and / or vibration generating construction activities (based on representative construction scenarios, including at ancillary facilities) that have the potential to generate noise and / or vibration impacts on surrounding sensitive receivers;
  - iii. identification of feasible and reasonable measures proposed to be implemented to minimise and manage construction noise and vibration impacts (including construction traffic noise impacts);
  - iv. procedures and mitigation measures to ensure relevant vibration and blasting criteria are achieved, including a suitable blast program, applicable buffer distances for vibration intensive works, use of low-vibration generating equipment / vibration dampeners or alternative construction methodology, and pre- and post- construction dilapidation surveys of sensitive structures where blasting and / or vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria);
  - v. a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded and reported, and, if any exceedance is detected, how any non-compliance would be rectified;
  - vi. an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction and decommissioning hours as defined in condition E4, including a risk assessment process under which an Environmental Representative may approve out-of-hour construction activities deemed to be of low environmental risk and refer high risk works for the Secretary's approval. The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low risk out-of-hour works, and detail a standard protocol for referring applications to the Secretary; and
  - vii. mechanisms for the monitoring, review and amendment of this Plan.
- (c) a **Construction Traffic and Access Management Plan** to manage construction traffic and access impacts of the Project. The Plan shall be developed in consultation with the relevant road authority and shall include, but not necessarily be limited:
- i. identification of construction traffic routes and construction traffic volumes (including heavy vehicle / spoil haulage / material haulage) on these routes;
  - ii. details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, and ingress and egress points;
  - iii. identification of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, property access, including details of oversize load movements;
  - iv. details of management measures to minimise traffic impacts, including temporary road work traffic control measures, onsite vehicle queuing and parking areas and management measures to minimise peak time congestion, and measures to ensure safe pedestrian and cycle access;
  - v. a response plan which sets out a proposed response to any traffic, construction or other incident; and
  - vi. mechanisms for the monitoring, review and amendment of this Plan.
- (d) A **Construction Soil and Water Quality Management Plan** to manage surface and groundwater impacts during construction of the Project. The plan shall be



developed in consultation with **DPI - Water** and Wellington Shire Council and include, but not necessarily be limited to:

- i. details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater;
- ii. surface water and ground water impact assessment criteria consistent with *Australian and New Zealand Environment Conservation Council (ANZECC) guidelines*;
- iii. management measures to be used to minimise surface and groundwater impacts, including details of how spoil and fill material required by the Project will be sourced, handled, stockpiled, reused and managed, erosion and sediment control measures, and the consideration of flood events;
- iv. management measures for contaminated material and a contingency plan to be implemented in the case of unanticipated discovery of contaminated material during construction;
- v. a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any exceedance of the criteria is detected how any non-compliance can be rectified; and
- vi. mechanisms for the monitoring, review and amendment of this Plan.

(e) a **Construction Heritage Management Plan** to detail how construction impacts on Aboriginal and Historic heritage will be minimised and managed. The Plan shall be developed in consultation with the OEH and registered Aboriginal stakeholders (for Aboriginal heritage), and include, but not necessarily be limited to:

- i. in relation to Aboriginal Heritage:
  - details of further investigation and identification of Aboriginal cultural heritage sites within the Project area;
  - details of management measures to be carried out in relation to Aboriginal heritage, including a detailed methodology and strategies for protection, monitoring, and conservation, of sites and items associated with the Project;
  - procedures for dealing with previously unidentified Aboriginal objects (excluding human remains) including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re-commence by a suitably qualified archaeologist in consultation with the Department, OEH and registered Aboriginal stakeholders, and assessment of the consistency of any new Aboriginal heritage impacts against the approved impacts of the Project, and registering of the new site in the OEH's Aboriginal Heritage Information Management System (AHIMS) register;
  - procedures for dealing with human remains, including cessation of works in the vicinity and notification of the Department, NSW Police Force, OEH and registered Aboriginal stakeholders and not recommencing any works in the area unless authorised by the Department and / or the NSW Police Force;
  - heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of this Approval and *National Parks and Wildlife Act 1974* (where relevant) including site identification, protection and conservation of Aboriginal cultural heritage;
  - procedures for ongoing Aboriginal consultation and involvement for the duration of the Project, and ensure that the Wellington Local Aboriginal Land Council (administrator) is kept informed of the process; and



- mechanisms for the monitoring, review and amendment of this plan.
- ii. in relation to Historic Heritage:
  - identification of heritage items directly and indirectly affected by the Project;
  - details of management measures to be implemented to prevent and minimise impacts on heritage items (including further heritage investigations, archival recordings and / or measures to protect unaffected sites during construction works in the vicinity);
  - procedures for dealing with previously unidentified heritage objects, (including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can recommence by a suitably qualified and experienced archaeologist in consultation with the Heritage Branch of OEH and the Department, and assessment of the consistency of any new heritage impacts against the approved impacts of the Project;
  - heritage training and induction processes for construction personnel (including procedures for keeping records of inductions and obligations under the *Heritage Act 1977* and these conditions including site identification, protection and conservation of non-Aboriginal cultural heritage; and
  - mechanisms for the monitoring, review and amendment of this plan.
- (f) a **Construction Flora and Fauna Management Plan** to detail how construction impacts on ecology will be minimised and managed. The Plan shall be developed in consultation with the OEH and shall include, but not necessarily be limited to:
  - i. plans for impacted and adjoining areas showing vegetation communities; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities have been recorded; including pre-clearing surveys to confirm the location of threatened flora and fauna species and associated habitat features;
  - ii. the identification of areas to be cleared and details of management measures (such as fencing, clearing procedures, removal and relocation of fauna during clearing, habitat tree management and construction worker education) to avoid any residual habitat damage or loss and to minimise or eliminate time lags between the removal and subsequent replacement of habitat;
  - iii. rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of rehabilitated areas;
  - iv. weed management measures focusing on early identification of invasive weeds and effective management controls;
  - v. a description of how the effectiveness of these actions and measures would be monitored, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported and, if any exceedance of the criteria is detected, how any non-compliance can be rectified;
  - vi. a procedure for dealing with unexpected EEC / threatened species identified during construction, including cessation of work and notification of the OEH and the Department, determination of appropriate mitigation measures in consultation with the OEH (including relevant re-location measures) and updating of ecological monitoring and / or biodiversity offset requirements; and
  - vii. mechanism for the monitoring, review and amendment of this Plan.
- (g) a **Construction Air Quality Management Plan** to detail how construction impacts on air quality will be minimised and managed. The Plan shall include, but not necessarily be limited to:
  - i. the identification of potential sources of dust;

- ii. dust management objectives;
- iii. mitigation measures to be implemented, including measures during weather conditions where high dust level episodes are probable (such as strong winds in dry weather);
- iv. a monitoring program to assess compliance with the identified objectives; and
- v. mechanisms for the monitoring, review and amendment of this Plan.



## **SCHEDULE F –** **OPERATION ENVIRONMENTAL MANAGEMENT**

### **HAZARD AND RISK**

#### **Bushfire Risk**

- F1. Throughout the operational life of the Project, the Proponent shall regularly consult with the RFS to ensure its familiarity with the Project. The Proponent shall comply with any reasonable request of the RFS to reduce the risk of bushfire and to enable fast access in emergencies.

#### **Safety Management System**

- F2. At least two months prior to the commencement of commissioning, the Proponent shall prepare a report outlining a comprehensive **Safety Management System**, covering all on-site systems relevant to ensuring the safe operation of the Project. The System shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept at the site and shall be available for inspection by the Department upon request. The Safety Management System shall be developed in accordance with the *Department's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'*, and should include:
- (a) procedures and programs for the maintenance and testing of the safety related equipment to ensure its integrity over the life of the Project; and
  - (b) an outline of a documented procedure for the management of change.

#### **Television and Radio Interference**

- F3. Prior to the commencement of commissioning of the Project, the Proponent shall undertake an assessment of the existing quality of the television / radio transmission available at a representative sample of receivers located within five kilometres of any wind turbine.
- F4. In the event of a complaint from a receptor located within five kilometres of a wind turbine regarding television / radio transmission during the operation of the Project, the Proponent shall investigate the quality of transmission at the receptor compared with the pre-commissioning assessment and where any transmission problems can be reasonably attributable to the Project, rectify the problems within three months of the receipt of the complaint, through the implementation of measures including:
- (a) modification to or replacement of receiving antenna;
  - (b) installation and maintenance of a parasitic antenna system;
  - (c) provision of a land line between the affected receptor and an antenna located in an area of favourable reception; and / or
  - (d) other feasible measures.

If interference cannot be overcome by the measures outlined in (a) to (d), the Proponent shall negotiate with the impacted landowner(s) about installing and maintaining a satellite receiving antenna. The Proponent shall be responsible for all costs associated with any such mitigation measures.

### **REHABILITATION AND REVEGETATION**

- F5. Disturbance to watercourses and / or associated riparian vegetation shall be rehabilitated to a standard equal to or better than the existing condition in consultation with the **DPI - Water** and DPI (Fisheries) within six months of the cessation of construction activities at the relevant area. Any revegetation measures undertaken shall be monitored and maintained consistent with the requirements of condition F6.



- F6. The Proponent shall implement a revegetation and rehabilitation programme for all areas of the Project footprint which are disturbed during the construction of the Project, which are not required for the ongoing operation of the Project, including temporary construction facility sites and sections of construction access roads. The Proponent shall ensure that all revegetation measures are implemented progressively where possible and in all cases within six months of the cessation of construction activities at the relevant area. Unless otherwise agreed to by the **Secretary**, the Proponent shall monitor and maintain the health of all revegetated areas until such time that the plantings have been verified by an independent and suitably qualified expert (whose appointment has been agreed to by the **Secretary**) as being well established, in good health and self sustaining.

## **NOISE**

### **Noise Verification Report**

- F7. Prior to commissioning of the wind farm, the Proponent shall provide an updated prediction of wind farm noise levels at all non-associated residences or representative clusters of non-associated residences that will experience wind turbine noise greater than 35 dB(A) when turbines are operating at rated power. The report is to be prepared in consultation with the EPA and should meet the requirements set out in Appendix 2.

### **Operational Noise Criteria – Wind Turbines**

- F8. The Proponent shall ensure that the noise generated by the operation of wind turbines does not exceed the greater of:
- (d) 35 dB(A); or
  - (e) the existing background noise level for each integer wind speed from cut-in speed to the rated power of the wind turbine generators, by more than 5 dB(A).

Unless otherwise replaced by an equivalent NSW wind farm noise guideline, noise generated by the project is to be measured in accordance with the relevant requirements of Sections 3.1 and 3.2 of the South Australian Environment Protection Authority's *Wind Farms Environmental Noise Guidelines 2009*, as modified by the provisions in Appendix 3.

However, these criteria do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.

### **Operational Noise Criteria – Ancillary Infrastructure**

- F9. The Proponent shall ensure that the noise generated by the operation of ancillary infrastructure does not exceed 35 dB(A)  $L_{Aeq}(15 \text{ minute})$  at any non-associated residence.

Noise generated by the project is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (as may be updated from time-to-time), as modified by the provision in Appendix 3.

However, these criteria do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.

## **Operating Conditions**

- F10. The Proponent shall:
- (a) implement best management practice to minimise the construction, operational, decommissioning and road traffic noise and vibration of the project;



- (b) implement sector management of wind turbines to manage any wind directions or meteorological conditions that are found to result in exceedances of the noise criteria in condition F8;
- (c) undertake noise monitoring within 3 months of the commissioning of the wind farm, or other timing as may be agreed by the Secretary, to determine whether the project is complying with the relevant conditions of this approval; and
- (d) carry out further noise monitoring if required by the Secretary, to the satisfaction of the Secretary.

F11.-F.18. Deleted.

## OPERATIONAL ENVIRONMENTAL MANAGEMENT

F19. Prior to the commencement of operation, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement (following approval) an **Operation Environmental Management Plan** for the Project. The Plan shall outline the environmental management practices and procedures that are to be followed during operation, and shall be prepared in consultation with relevant agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:

- (a) a description of activities to be undertaken during operation of the Project (including staging and scheduling);
- (b) statutory and other obligations that the Proponent is required to fulfil during operation, including approval / consents, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
- (c) overall environmental policies, guidelines and principles to be applied to the operation of the Project;
- (d) a description of the roles and responsibilities for relevant employees involved in the operation of the Project, including relevant training and induction provisions for ensuring that employees are aware of their environmental and compliance obligations under these Conditions of Approval;
- (e) an environmental risk analysis to identify the key environmental performance issues associated with the operation phase of the Project; and
- (f) details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts, including those safeguards and mitigation measures detailed in the EA (and any impacts arising from the staging of the construction of the Project); and
- (g) details of how sector management would be used to ensure that operational noise criteria are not exceeded.

The Plan shall be submitted for the approval of the Secretary no later than one month prior to the commencement of operation, or as otherwise agreed by the Secretary. Operation shall not commence until written approval has been received from the Director General. Upon receipt of the Secretary's approval, the Proponent shall make the Plan publicly available as soon as practicable.

*Note: The approval of an Operation Environmental Management Plan does not relieve the Proponent of any other requirement associated with this Project Approval. If there is an inconsistency with an approved Operation Environmental Management Plan and the conditions of this Project Approval, the requirements of this Project Approval prevail.*

F20. Deleted



## **SCHEDULE G – ADDITIONAL PROCEDURES**

### **DECOMMISSIONING**

- G1. Unless otherwise agreed by the **Secretary**, within 18 months of the cessation of operation of the Project, the site shall be decommissioned and returned by the Proponent, as far as practicable, to its condition prior to the Project commencement, in consultation with the relevant landowner(s) and to the satisfaction of the **Secretary** (and in accordance with the Decommissioning and Rehabilitation Plan included in the *Bodangora Wind Farm Environmental Assessment* (May 2012)).

All generating facilities and associated infrastructure (including but not necessarily limited to the substation and transformers, switchyard, operation and maintenance facility, overhead transmission lines and access roads) shall be removed from the site unless otherwise agreed by the **Secretary**. Project related infrastructure (including access roads) may only be retained on site, where the Proponent has demonstrated to the satisfaction of the **Secretary** prior to the commencement of decommissioning, that these components: are permissible under the site's statutory landuse provisions in force upon commencement of the decommissioning; would not pose an ongoing impediment to permissible landuse at the properties; and their retention has been agreed to in writing (with evidence provided to the **Secretary**) by the relevant landowners.

This condition does not apply to any infrastructure which, as at the relevant date, is owned by a network operator under the *Electricity Supply Act 1995 (NSW)* (or any equivalent provisions which are in force as at the relevant date).

- G2. The Proponent shall update the **Decommissioning and Rehabilitation Plan** every five years from the date of preparation, until decommissioning and rehabilitation is completed, and a copy of the updated versions provided to the **Secretary** and made publicly available. The updated Plan shall be consistent with the requirements of the *draft NSW Planning Guidelines – Wind Farms* (December 2011), as updated. The updated Plan shall include estimated costs of and funding arrangements for decommissioning, including provision for a decommissioning bond or other funding mechanisms, where the Plan concludes that estimated costs and funding arrangements are inadequate.
- G3. Any individual turbine that ceases operating for a period of more than 12 consecutive months shall be dismantled within 18 months after the 12 month period.
- G4. Unless otherwise agreed by the **Secretary**, the Proponent shall commission an independent, qualified person or team to undertake the following in consultation with the relevant road authority:
- (a) prior to the commencement of decommissioning, review the proposed route and existing access provisions to the Wind Farm Site to determine whether the route and existing provisions allow for safe access of decommissioning vehicles associated with the Project (including appropriate site distances and provisions for over-mass or over-dimensional transport and safety with other road users). Where improvements or changes to the proposed route are required, the Proponent shall implement these in consultation with the relevant road authority, prior to the commencement of decommissioning and at the full expense of the Proponent; and



- (b) assess all roads proposed to be used for over-mass and / or over-dimensional transport (including intersections, bridges, culverts and other road features) prior to the commencement of decommissioning to determine whether the existing road condition can accommodate the proposed over-mass and / or over-dimensional haulage. Where improvements are required, the Proponent shall implement these in consultation with the relevant road authority, prior to the commencement of decommissioning and at the full expense of the Proponent.

Upon determining the haulage route(s) for decommissioning vehicles associated with the Project, and prior to decommissioning, undertake a **Road Dilapidation Report**. The Report shall assess the current condition of the road(s) and describe mechanisms to restore any damage that may result due to traffic and transport related to the decommissioning of the Project. The Report shall be submitted to the relevant road authority for review prior to the commencement of haulage.

Within three months of completion of decommissioning, a subsequent Report shall be prepared to assess any damage that may have resulted from the construction of the Project (including mechanisms to restore any damage) and submitted to relevant road authority for review.

Measures undertaken to restore or reinstate roads affected by the Project shall be undertaken in accordance with the reasonable requirements of the relevant road authority (including timing requirements), and at the full expense of the Proponent.

- G5. Prior to the commencement of decommissioning, or as otherwise agreed by the **Secretary**, the Proponent shall prepare and implement (following approval) a **Decommissioning Environmental Management Plan** for the Project. The Plan shall outline the environmental management practices and procedures that are to be followed during decommissioning, and shall be prepared in consultation with the relevant agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:
- (a) a description of activities to be undertaken during decommissioning of the Project (including staging and scheduling);
  - (b) statutory and other obligations the Proponent is required to fulfil during decommissioning, including approval / consents, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
  - (c) a description of the roles and responsibilities for relevant employees involved in the decommissioning of the Project, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these Conditions of Approval;
  - (d) an environmental risk analysis to identify the key environmental performance issues associated with the decommissioning phase; and
  - (e) details of how environmental performance will be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the decommissioning of the Project). In particular, the following environmental performance issues shall be addressed in the Plan:
    - i. compounds and ancillary facilities management;
    - ii. noise and vibration;
    - iii. traffic and access;
    - iv. soil and water quality and spoil management;
    - v. air quality and dust management;
    - vi. hazardous material and waste management; and

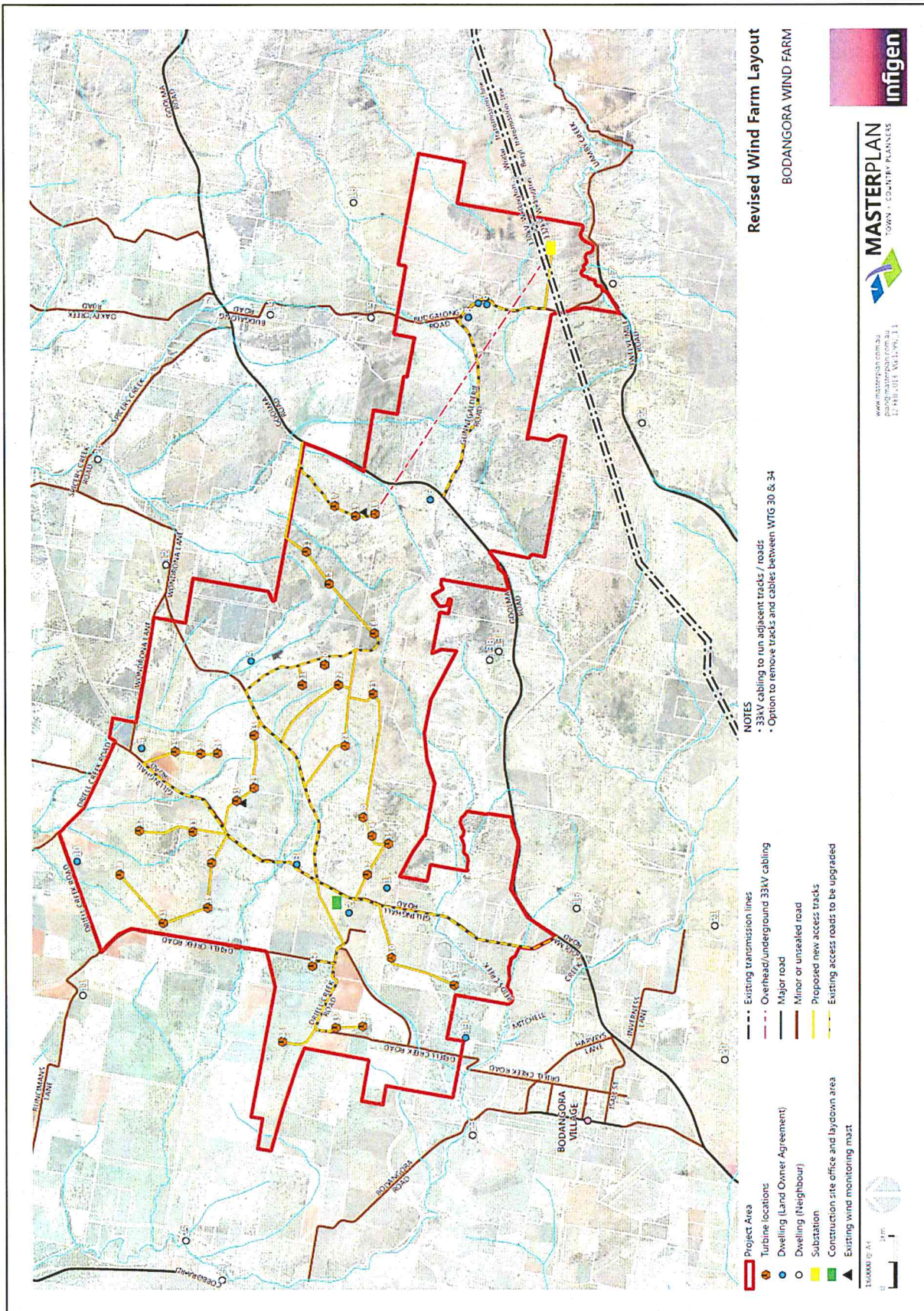


vii. hazard and risk management, including bushfire risk.

The Plan shall be submitted for the approval of the **Secretary** no later than one month prior to the commencement of decommissioning, or as otherwise agreed by the **Secretary**. The Plan may be prepared in stages, however, decommissioning works shall not commence until written approval has been received from the **Secretary**.

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# APPENDIX 1 PROJECT LAYOUT





## APPENDIX 2

### NOISE VERIFICATION REPORT

Consistent with condition F7 and prior to commissioning of the wind farm, the Proponent must prepare a noise assessment report that includes but is not limited to the following:

- (a) Background noise levels for each of the relevant receiver locations that are not associated with the project. The background noise level data must be collected in accordance with the requirements and recommendations of 'Section 3.1 Background Noise' of the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009). Relevant data collected for the EA may be used for this purpose.
- (b) Address and GPS location of all non-associated relevant receivers.
- (c) Wind speed measurements for at least each integer wind speed from cut-in speed to the speed up to the rated power of the wind turbine generators in accordance with the requirements of Section 3.2 of the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009).
- (d) Predicted noise levels at all relevant receiver locations that are not associated with the project for each integer wind speed from cut-in speed to the speed of the rated power in accordance with the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009). Noise modelling should be representative of final turbine selection and layout design.
- (e) Where operations need to be controlled under certain meteorological conditions in order to meet noise criteria set out in condition F8, these controls (such as sector management) must be described in detail.
- (f) The noise assessment report should include all the documentation required by Section 5.1 and 5.2 of the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009).

## APPENDIX 3 NOISE COMPLIANCE ASSESSMENT

### PART A: SOUTH AUSTRALIAN WIND FARMS: ENVIRONMENTAL NOISE GUIDELINES 2009 (MODIFIED)

Unless stipulated otherwise, *South Australian Wind Farms: Environmental Noise Guidelines 2009 (Modified)* refers to the South Australian EPA document modified for use in NSW. The modifications are as follows:

#### **Tonality**

The presence of excessive tonality (a special noise characteristic) is consistent with that described in *ISO 1996.2: 2007 Acoustics — Description, measurement and assessment of environmental noise – Determination of environmental noise levels* and is defined as when the level of one-third octave band measured in the equivalent noise level  $Leq(10\text{minute})$  exceeds the level of the adjacent bands on both sides by:

- 5dB or more if the centre frequency of the band containing the tone is in the range 500Hz to 10,000Hz;
- 8dB or more if the centre frequency of the band containing the tone is in the range 160 to 400Hz; and/or
- 15dB or more if the centre frequency of the band containing the tone is in the range 25Hz to 125Hz.

If tonality is found to be a repeated characteristic of the wind turbine noise, 5 dB(A) should be added to measured noise levels from the wind farm. If tonality is only identified for certain wind directions and speeds, the penalty is only applicable under these conditions. The tonal characteristic penalty applies only if the tone from the wind turbine is audible at the relevant receiver. Absence of tone in noise emissions measured at an intermediate location is sufficient proof that the tone at the receiver is not associated with the wind farm's operation. The assessment for tonality should only be made for frequencies of concern from 25 Hz to 10 KHz and for sound pressure levels above the threshold of hearing (as defined in *ISO 389.7: 2005 Acoustics - Reference zero for the calibration of audiometric equipment - Part 7: Reference threshold of hearing under free-field and diffuse-field listening conditions*).

#### **Low Frequency Noise**

The presence of excessive low frequency noise (a special noise characteristic) [i.e. noise from the wind farm that is repeatedly greater than 65 dB(C) during the day time or 60 dB(C)) during the night time at any relevant receiver] will incur a 5 dB(A) penalty, to be added to the measured noise level for the wind farm, unless a detailed internal low frequency noise assessment demonstrates compliance with the proposed criteria for the assessment of low frequency noise disturbance (UK Department for Environment, Food and Rural Affairs (DEFRA, 2005)) for a steady state noise source.

#### **Notes:**

- For the purposes of these conditions, a special noise characteristic is defined as a repeated characteristic if it occurs for more than 10% of an assessment period. This equates to being identified for more than 54 minutes during the 9 hour night from 10pm – 7am, or for more than 90 minutes during the 15 hour day from 7am – 10pm. This definition refers to verified wind farm noise only.
- The maximum penalty to be added to the measured noise level from the wind farm for any special noise characteristic individually or cumulatively is 5 dB(A).
- Notwithstanding conditions F8 and F9 of this project approval, the noise limits specified under these conditions do not apply to any residence where a noise agreement is in place between the Proponent and the owner(s) of those residences in relation to noise impacts and / or noise limits. For this condition to take effect, the noise agreements shall satisfy the relevant requirements of *Guidelines for Community Noise (WHO, 1999)*.



## **PART B: NOISE COMPLIANCE ASSESSMENT**

### **Applicable Meteorological Conditions – Wind Turbines**

1. The noise criteria in condition F8 of the conditions are to apply under all meteorological conditions.

### **Applicable Meteorological Conditions – Other Facilities**

2. The noise criteria in condition F9 of the conditions are to apply under all meteorological conditions except the following:
  - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
  - (b) temperature inversion conditions between 1.5°C and 3°C/100m and wind speeds greater than 2 m/s at 10 m above ground level; or
  - (c) temperature inversion conditions greater than 3°C/100m.

