

# Project Approval

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

### ATTACHMENT 1

Glen Innes Landscape Guardians Inc. v Glen Innes WindPower Pty Ltd & Minister for Planning

Land and Environment Court Proceedings No. 10926 of 2009

### CONDITIONS OF APPROVAL

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Blue type represents Modification 1 – August 2013.

Red type represents Modifications 2 and 3 – January 2016.

### SCHEDULE 1

<b>Application No:</b>	07_0036
<b>Proponent:</b>	Glen Innes WindPower Pty Ltd
<b>Approval Authority:</b>	Minister for Planning
<b>Land:</b>	The land shown in Appendix 1
<b>Project:</b>	Glen Innes Wind Farm Project

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## SCHEDULE 2

<b>Ancillary infrastructure</b>	All wind farm infrastructure with the exception of wind turbines, including but not limited to collector substations, switching stations, permanent offices and site compounds, electricity transmission lines and internal roads
<b>CEMP</b>	Construction Environmental Management Plan
<b>Conditions of Approval</b>	The Minister's conditions of approval for the project.
<b>Construction</b>	The construction of the development, including but not limited to the construction of wind turbines, ancillary infrastructure and road upgrades (excludes geotechnical drilling and surveying)
<b>Council</b>	Glen Innes Severn Council
<b>Curtilage</b>	The land immediately surrounding a residence, including any closely associated buildings or structures where domestic and/or recreational activities take place
<b>Decommissioning</b>	The removal of wind turbines and any associated above ground infrastructure
<b>Department</b>	Department of Planning and Environment
<b>DPI Water</b>	Department of Primary Industries - Water
<b>Dust</b>	Any solid material that may become suspended in air or deposited
<b>EA</b>	<p><i>Glen Innes Wind Farm Environmental Assessment</i> (Glen Innes Wind Power, 2008) as amended by:</p> <ul style="list-style-type: none"> <li>• <i>Glen Innes Wind Farm Submissions Report</i>, prepared by Connell Wagner and dated May 2009;</li> <li>• <i>Glen Innes Wind Farm Revised Turbine Layout</i>, prepared by Aurecon and dated June 2010; and</li> <li>• <i>Glen Innes Wind Farm Section 75W Modification Environmental Assessment</i>, prepared by Aurecon and dated March 2014.</li> </ul>
<b>EPA</b>	Environment Protection Authority
<b>Feasible</b>	Feasible relates to engineering considerations and what is practical to build or implement
<b>LLS</b>	Local Land Services
<b>Minister, the</b>	Minister for Planning
<b>Non-associated residence</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 development. In some cases, this agreement will be restricted. First, it may only cover certain aspects of the development (such as the noise or visual impacts). In such cases, the residence is only associated for those aspects covered by the agreement, and remains a non-associated residence for all those aspects that are not covered by the agreement. Second, while the agreement may cover a certain aspect of the development (such as noise impacts), it may limit the extent of any such impact (by setting absolute noise levels at a residence, for instance). In these cases, the residence is only associated to the extent that the impact is covered by the agreement, and is considered to be non-associated for any impacts that exceed the limits specified in the agreement
<b>OEH</b>	Office of Environment and Heritage
<b>Operation</b>	The operation of the development, but does not include commissioning trials of equipment or use of temporary facilities
<b>Project</b>	The development described in the EA and shown in Appendix 2
<b>Proponent</b>	Glen Innes WindPower (GIWP), or any other person who seeks to carry out the project approved under this approval
<b>Reasonable</b>	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
<b>Residence</b>	Any dwelling in existence at the date of this consent, or a dwelling that is the subject of a development application that was lodged but not yet determined at the date of this consent
<b>RFS</b>	NSW Rural Fire Service
<b>RMS</b>	NSW Roads and Maritime Services
<b>Secretary</b>	Secretary of the Department, or nominee
<b>Sector management</b>	Sector management refers to the implementation of techniques that reduce the impacts generated by individual wind turbines, or clusters. Such techniques may include operating the turbines in 'low noise' mode, shutting down turbines, or using firmware controls
<b>Site</b>	The land defined in Appendix 1

## 1. ADMINISTRATIVE CONDITIONS

### Terms of Approval

- 1.1 The Proponent shall carry out the project:
- generally in accordance with the EA; and
  - in accordance with the conditions of this approval.
- Note: The general layout of the project is depicted in Appendix 2.*
- 1.2 If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
- 1.3 The Proponent shall comply with any reasonable requirement(s) of the Secretary arising from the Department's assessment of:
- any strategies, plans, programs, reviews, audit correspondence that are submitted in accordance with the requirements of this approval;
  - any reports, reviews or audits commissioned by the Department regarding compliance with this approval; and
  - the implementation of any actions or measures contained in these documents.
- 1.4 This project is modified to delete Turbines 10 and 18 from the scope of the project. This approval does not authorise their construction.

Note: turbine 18 has been removed from the project based on a precautionary approach with respect to cumulative visual and noise impacts predicted to occur at the closest non-involved residence.
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- 1.5 The approval shall lapse on 31 January 2017 unless the Proponent has physically commenced the project.

### Statutory Requirements

- 1.6 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 for 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.
- 1.7 The Proponent may elect to construct or operate the project in discrete work packages or stages. In this case, these conditions of approval may be complied with separately for each discrete work package or stage, as relevant.

### Decommissioning

- 1.8 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 commencement, in consultation with the relevant landowner(s) and to the satisfaction of the Secretary (and in accordance with the Decommissioning and Rehabilitation Plan required by condition 1.9).

All generating facilities and associated infrastructure (including but not necessarily limited to the substations 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).

- 1.9 The Proponent shall prepare prior to construction commencing and update a Decommissioning and Rehabilitation Plan every five years from the date of preparation, until decommissioning and rehabilitation is completed. A copy of the Plan and updated versions are to be 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.

- 1.10 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, unless the Secretary agrees otherwise.

1.10A Deleted.

**Decommissioning Road Dilapidation**

- 1.10B 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;
- 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, an independent and qualified person or team shall 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 **decommissioning of the Project**.

Measures undertaken to restore or reinstate roads affected by the Project shall be undertaken **in a timely manner**, in accordance with the reasonable requirements of the relevant road authority, and at the full expense of the Proponent.

**Decommissioning Environmental Management Plan**

- 1.10C 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/approvals, 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.

## Construction Site Office

- 1.11 The Proponent shall not use any part of Travelling Stock Route 67474 for a temporary construction site office for the project without the prior approval of the LLS.

## 2. SPECIFIC ENVIRONMENTAL CONDITIONS

### Visual

#### *Visual Impact Mitigation*

- 2.1 Prior to the commencement of construction, the Proponent shall notify in writing the owner/s of non-associated residences within 4 kilometres of any wind turbine that they have the right to request implementation of visual impact mitigation measures at their residence if the wind turbines will be visible from the residence (including its curtilage).

*Note: If the construction of the development is being staged, the Proponent is only required to notify those owners that would be within 4 kilometres of any wind turbine that forms part of the relevant stage.*

- 2.1A If following the commencement of construction, the Proponent receives a written request from the owner of any residence referred to in condition 2.1 above for the implementation of visual impact mitigation measures, then the Proponent shall implement measures such as landscaping treatments or vegetation screens at the residence (including its curtilage) in consultation with the landowner.

These mitigation measures must be reasonable and feasible, directed towards reducing the visual impacts of the wind turbines on the residence (including its curtilage), and commensurate with the level of visual impact.

The mitigation measures must be implemented within 12 months of receiving the written request, unless the Secretary agrees otherwise.

If the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

#### *Notes:*

- To avoid any doubt, the visual impact mitigation measures must be aimed at reducing the visibility of the wind turbines from the residence and its curtilage. Mitigation measures are not required to be implemented to reduce the visibility of wind turbines from other locations on the property.*
- In some cases, mitigation measures may not be warranted as the wind turbines would not be visible from the residence and its curtilage.*
- The identification of appropriate visual impact mitigation measures will be easier following the construction of the wind turbines. While landowners may ask for the implementation of visual impact mitigation measures shortly after the commencement of construction, they should consider the merits of delaying this request until the wind turbines are visible from their residence.*

- 2.2 Prior to the commencement of operation, the Proponent shall consult with Council and the RMS in relation to the need to provide landscaping screening measures along public road reserves including but not limited to the Gwydir Highway and shall report to the Secretary on the outcomes of this consultation. The Proponent shall implement landscaping screening measures in accordance with the Secretary's requirements.

#### *Turbine External Design*

- 2.3 Wind turbine generators shall be painted matt off-white/grey. The blades shall be finished with a surface treatment that minimises any potential for glare or reflection.
- 2.4 No advertising, signs or logos shall be mounted on the turbines, except where required for safety purposes. A corporate logo may be placed on the turbines provided it is not distinguishable by the naked eye from any publicly accessible location or from any, properties not associated with the project.

#### *Lighting*

- 2.5 No external lighting other than low intensity security night lighting of infrastructure associated with the project, including wind turbine generators is permitted on site unless otherwise agreed or directed by the Secretary.

#### *Shadow-flicker*

- 2.6 Shadow flicker arising from the operation of the project shall not exceed 30 hours/annum at any residence not associated with the project.

Within 6 months of the commencement of operation of the project (or such other period agreed to by the Secretary), the Proponent shall prepare a Shadow Flicker Report for the approval of the Secretary which assesses the impact of blade flicker at Cherry Tree, being Lot 89 DP 753270; Highfields, being Lot 2 DP 229974; Mayvona, being Lot 45 DP 3191 and Ilparan B, being Lot 1 DP 225300.

The Proponent shall also keep records of any sector management used to comply with this condition.

#### Viewing Site

- 2.7 Prior to the commencement of construction, the Proponent shall in consultation with Council and/or the RMS, investigate the potential for a wind farm viewing site, interpretive signage and associated facilities to be installed and maintained in the locality. If required by Council and/or the RMS, the Proponent shall install a viewing site, signage and associated facilities. Responsibilities for maintenance of the viewing site shall be agreed to between the Proponent and Council and/or the RMS.

#### Noise & Vibration

##### Construction & Decommissioning

- 2.8 The Proponent shall implement all reasonable and feasible measures to minimise the construction or decommissioning noise of the development, including any associated traffic noise.
- 2.9 The Proponent shall ensure that the noise generated by any construction or decommissioning activities is managed in accordance with the best practice requirements outlined in the *Interim Construction Noise Guideline* (DECC, 2009), or its latest version.
- 2.10 Unless the Secretary agrees otherwise, the Proponent shall only undertake construction or decommissioning activities between:
- 7 am to 6 pm Monday to Friday;
  - 8 am to 1 pm Saturdays; and
  - at no time on Sundays and NSW public holidays.

The following construction activities may be undertaken outside these hours without the approval of the Secretary:

- activities that are inaudible at non-associated residences;
- 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 life, property and/or material harm to the environment.

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

**Table 1: Blasting criteria**

Location	Airblast overpressure (dB(L in Peak))	Ground vibration (mm/s)	Allowable exceedance
Any non-associated residence	120	10	0%
	115	5	5% of the total number of blasts or events over a period of 12 months

2.13 Deleted.

2.14 Deleted.

2.15 Deleted.

##### Operational Noise Criteria – Wind Turbines

- 2.16 The Proponent shall ensure that the noise generated by the operation of wind turbines does not exceed the relevant criteria in Table 2 at any non-associated residence.

**Table 2: Noise criteria dB(A)**

Residence	Criteria (dB(A)) with Reference to Hub Height Wind Speed (m/s)											
	3	4	5	6	7	8	9	10	11	12	13	14
Cherry Tree (Eungai), Elm Vale, Klossie, Green House, Lombardy, Mayvona, Moonarie, Nullagai, Wandsworth	35	35	35	35	35	35	35	36	38	40	43	46
Highfields, Wattle Vale	35	35	35	35	35	35	36	38	40	42	44	46



<b>Residence</b>	<b>Criteria (dB(A)) with Reference to Hub Height Wind Speed (m/s)</b>											
	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>
Balaclava A, Ilparran A, Ilparran B, Kalanga A, Kalanga B, Kalanga C, Minamurra A, Minamurra B, Minamurra C, Green Valley (Oakes), Rivoli	35	35	35	35	35	36	37	38	39	40	40	41
Girrahween, Glengarry	35	35	35	35	35	35	35	35	35	36	37	39
All other non-associated residences	The higher of 35 dB(A) or the existing background noise level (L <sub>A90</sub> (10-minute)) plus 5 dB(A)											

Note: To identify the residences referred to in Table 2, see the figure in Appendix 2.

Noise generated by the operation of the wind turbines is to be measured in accordance with the relevant requirements of the South Australian Environment Protection Authority's *Wind Farms – Environmental Noise Guidelines 2009* (or its latest version), as modified by the provisions in Appendix 3. If this guideline is replaced by an equivalent NSW guideline, then the noise generation is to be measured in accordance with the requirements in the NSW guideline.

2.17 Deleted.

2.18 Deleted.

2.19 Deleted.

2.20 Deleted.

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

2.21 The Proponent shall ensure that the noise generated by the operation of ancillary infrastructure does not exceed 35 dB(A) L<sub>Aeq</sub>(15 minute) at any non-associated residence.

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (or its equivalent) as modified by the provision in Appendix 3.

#### **Noise Monitoring**

2.22 Within six months of the commencement of operations, the Proponent shall:

- undertake noise monitoring to determine whether the development is complying with the relevant conditions of this consent; and
- submit a copy of the monitoring results to the Department and the EPA.

2.23 The Proponent shall undertake further noise monitoring of the development if required by the Secretary.

2.24 Deleted.

2.25 Deleted.

2.26 Deleted.

#### **Flora & Fauna**

2.27 Prior to the commencement of construction of the project, the Proponent shall, in consultation with OEH, develop (and following approval, implement) a compensatory habitat package to offset in perpetuity the value of habitat lost as a result of the project, to the satisfaction of the Secretary. The package shall:

- develop a methodology to quantify the offset of vegetation communities based on an improve or maintain outcome; and
- demonstrate reasonable timeframes for implementation and describe how the offset shall be guaranteed and monitored in perpetuity.

The Proponent shall undertake a post construction review of clearing to confirm the extent of clearing was not greater than predicted, if clearing is greater, then the package shall be modified and the offset increased to the value of actual habitat lost.

Prior to the commencement of construction, clearly defined work areas (including access trails) shall be established using a combination of posts, fencing or markers, and suitably marked up maps as appropriate. All on-site construction movements are to be restricted to these areas, to prevent uncontrolled or inadvertent access by vehicles or construction personnel to vegetation and fauna habitat to be protected under this approval. All works and structures shall be located to avoid abutting forest and woodland remnants protected under this approval. The Proponent shall engage a suitably qualified ecologist to advise on the limits of clearing for turbine hardstand areas and access roads.



## Traffic

- 2.28 The Proponent shall only use the former Gwydir Highway Alignment (within Travelling Stock Route 67474) for temporary access to the site during the construction phase of the project. The former Gwydir Highway Alignment is not to be used during the operational phase of the project without the prior consent of the **LLS**.
- 2.29 The Proponent shall ensure that all heavy construction vehicles use the Gwydir Highway to access the project.
- 2.30 The Proponent shall design and construct the road access from the Gwydir Highway (through the Travelling Stock Route 67474) to the site in accordance with the AUSTROADS Rural Access Standards and to the satisfaction of the **RMS** and the **LLS**. The Proponent shall obtain approval of the road access design from the **RMS**, prior to construction of the road access to the site.
- 2.31 Deleted.
- 2.32 Deleted.
- 2.33 Should road access via the former Gwydir Highway Alignment not be permitted by the **LLS** for the operational phase of the project, the Proponent (and its contractors) shall only use Rose Hill Road for operational access to the site. Other roads are not permitted to be used by the Proponent for site access, except in the case of emergencies or site evacuation. Should Rose Hill Road be used for the operation of the project, the Proponent shall seal the section of Rose Hill Road from its junction with the Gwydir Highway up to the private residences in consultation with the Council, prior to the commencement of operation of the project.
- 2.34 Upon determining the haulage route(s) for the construction phase of the project, the Proponent shall:
- commission a qualified person to undertake a Road Dilapidation Report of all roads proposed to be used for construction activities excluding the Gwydir Highway in consultation with relevant road authorities. The Report shall assess the current condition of the relevant roads; and
  - following completion of construction a subsequent Road Dilapidation Report shall be prepared by a qualified person and in consultation with relevant road authorities to assess any damage that may have resulted due to traffic and transport related to the construction of the project.

Any damage identified in the subsequent Road Dilapidation Report or recommended by the relevant road authorities after review of the subsequent Report shall be restored to a state, described in the original Road Dilapidation report at the Proponent's cost. Such work shall be undertaken at a time as agreed upon between the Proponent and the relevant road authorities. In the event of a dispute between the parties with respect to the extent of restorative work that may be required under this condition, any 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.

- 2.34A The Proponent shall ensure the future use of any unformed Crown road reserve is not compromised by the development.

## Hazards & Risk

### ***Bushfire Risk***

- 2.35 Throughout the life of the project, the Proponent shall regularly consult with the local RFS to ensure its familiarity with 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.
- 2.36 The Proponent shall:
- ensure there is appropriate fire-fighting equipment held on site to respond to any fires that may occur at the site during construction and operation of the project; and
  - assist the RFS and emergency services as much as possible if there is a fire on-site during the project.
- 2.37 The Proponent shall manage as an "Inner Protection Area" the land around any structure associated with the project to a distance of 10 metres or to the property boundary, as outlined within the "Planning for Bush Fire Protection 2006" and the RFS Document "Standards for Asset Protection Zones."

### ***Aviation Obstacles & Hazards***

- 2.38 Prior to the commencement of construction and operation, the Proponent shall provide the following information to the Civil Aviation Safety Authority, Royal Australian Air Force- Aeronautical Information Service and Airservices Australia as well as all known users of privately owned local airfields:
- "as constructed" coordinates in latitude and longitude of each wind turbine generator;
  - final height of each wind turbine generator in Australian Height Datum; and
  - ground level at the base of each wind turbine generator in Australian Height Datum.

### **Bunding & Spill Management**

- 2.39 The Proponent shall store and handle all dangerous goods (as defined by the Australian Dangerous Goods Code) and combustible liquids, strictly in accordance with:
- a) all relevant Australian Standards;
  - b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
  - c) the EPA's Environment Protection Manual Technical Bulletin *Bunding and Spill Management*.

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

### **Safety Management System**

- 2.40 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 related to ensuring the safe operation of the project. The report 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.

### **Electromagnetic Interference**

#### **Television & Radio Interference**

- 2.41 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 residential dwellings located within 5 kilometres of any wind turbine.
- 2.42 The Proponent shall undertake reasonable and feasible mitigation to rectify any television/radio transmission problems reasonably attributable to the project at any residential dwelling located within 5 kilometres of a wind turbine. Such measures may include:
- 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 receiver and an antenna located in an area of favourable reception; 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 about installing and maintaining a satellite receiving antenna.

Any requested works shall be completed within three months of the completion of the relevant television and/or radio reception assessment, unless otherwise agreed by the landowner. The Proponent shall be responsible for all costs associated with implementing mitigation measures.

- 2.43A Prior to the commencement of construction, the Proponent shall 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.

### **Radio Communication**

- 2.43 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 consult with the operator and undertake appropriate remedial measures to rectify any issue within 2 months of the problem being identified. Such measures may include:
- a) modification to or relocation of the existing antennae;
  - b) installation of a directional antennae; and/ or
  - c) installation of an amplifier to boost the signal strength.

### **Water Quality Impacts**

- 2.44 Except as may be expressly provided by an Environment Protection Licence for the project, the Proponent shall comply with section 120 of the *Protection of the Environment Operations Act 1997* which prohibits the pollution of waters.
- 2.45 Soil and water management controls shall be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities, in accordance with Landcom's *Managing Urban Stormwater: Soils and Conservation*.

## Heritage Impacts

- 2.46 Should the final wind farm design require works in the vicinity of Site GIWF No. 1, the Proponent shall, prior to the commencement of construction in that area, develop a management and mitigation strategy for the site in consultation with the Glen Innes Aboriginal Land Council and **OEH**.
- 2.47 If during the course of construction the Proponent becomes aware of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the **OEH** informed in accordance with the *National Parks and Wildlife Act 1974* as well as the Glen Innes Aboriginal Land Council. Works shall not recommence until written authorisation from **OEH** is received by the Proponent.
- 2.48 If during the course of construction the Proponent becomes aware of any unexpected historical relic(s), all work likely to affect the relic(s) shall cease immediately and the Heritage Office notified in accordance with the *Heritage Act 1977*. Works shall not recommence until the Proponent receives written authorisation from the Heritage Office.

## Waste Generation & Management

- 2.49 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 or any waste generated on site to be disposed of at 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.
- 2.50 The Proponent shall ensure that all liquid and / or non-liquid waste generated and / or stored on the site is assessed and classified in accordance with *Waste Classification Guidelines Part 1: Classifying Waste* (DECC, 2008), or any future guideline that may supersede that document.

## Survey Marks

- 2.51 The Proponent shall comply with the requirements of the Department of Lands should it need to utilise the Ross Trig Station at any time during construction or operation of the Project.

## Aerial Agricultural Spraying

- 2.52 If any aerial agricultural activity is demonstrated to be disrupted on any property surrounding the site, being any non-associated property having a boundary located within 2.5 kilometres of a turbine constructed in accordance with this Project, due to the operation of the turbines, the Proponent shall fully fund to the affected landowner, the cost difference between the current aerial agricultural activities:
- and a reasonable alternative application method in the affected area; or
  - and continuing aerial agricultural activities should additional expenses occur due to the extra flight time and trips required because of the presence of wind turbines.

If the Proponent and affected landowner cannot agree on the amount of compensation payable under this condition, either party may refer the matter to the **Secretary** for resolution at any time. The **Secretary's** determination of the matter will be final and binding to both parties.

## Ancillary Facilities

- 2.53 The sites for ancillary facilities shall satisfy the following criteria unless otherwise approved through the Construction Environmental Management Plan(s) for the project (refer to condition 6.2):
- be located within the site;
  - have ready access to the road network;
  - be located to minimise the need for heavy vehicles to travel through residential areas;
  - be sited on relatively level land;
  - be separated from nearest residences by at least 200 metres (or at least 250 metres for a temporary batch plant) with the exception of the temporary site office location;
  - be located above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented;
  - not require vegetation clearing beyond that already required for the project; and
  - not adversely affect the land use of adjacent properties.

The location of the Ancillary Facilities shall be identified in the Construction Environmental Management Plan(s) and shall include an analysis against the above criteria. Where these criteria cannot be met, the Construction Environmental Management Plan(s) shall demonstrate there will be no adverse impacts from the Ancillary Facility's construction or operation.

## 3. ENVIRONMENTAL MONITORING AND AUDITING

### Bird & Bat Monitoring

- 3.1 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 account of 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 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 and include monthly mortality assessments and periodic local population censuses 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 need for mitigation measures, progress with implementation of such measures, and their success.

The Reports referred to under part f) shall be submitted to the **Secretary** on an annual basis, from the commencement of operation, and shall be prepared within two months of the end of the reporting period. The **Secretary** may, at the request of the Proponent, vary the reporting requirement or period by notice in writing to the Proponent. The Proponent may request the **Secretary** to consider a variation to the reporting requirements at any time.

The Proponent is required to implement reasonable and feasible 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**.

#### **Independent Environmental Auditing**

- 3.2 Within two years of the commencement of Operation of the project, and then as may be directed by the **Secretary**, the Proponent shall commission an independent person or team to undertake an **Environmental Audit** of the project. The independent person or team shall be approved by the **Secretary** prior to the commencement of the Audit. The Audit shall:
- a) be carried out in accordance with ISO 19011:2002 - Guidelines for Quality and or Environmental Management Systems Auditing;
  - b) assess compliance with the requirements of this approval, and other licences and approvals that apply to the project;
  - c) assess the environmental performance of the project against the predictions made and conclusions drawn in the documents referred to under condition 1.1 of this approval;
  - d) review the effectiveness of the environmental management of the project, including any environmental impact mitigation works; and
  - e) review the adequacy of the Proponent's response to any complaints made about the project through the Complaints Register required under condition 5.4.

An **Environmental Audit Report** shall be submitted for comment to the **Secretary** within two months of the completion of the Audit, detailing the findings and recommendations of the Audit and including a detailed response from the Proponent to any of the recommendations contained in the Report.

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

- 4.1 Subject to confidentiality, the Proponent shall make all documents required under this approval (including all reports required to be produced or procured during the commissioning, operation and decommissioning phases of the project) available for public inspection on request.

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

- 4.2 Prior to the commencement of construction of the project, the Proponent shall establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with the project subject to confidentiality. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:
- a) the current implementation status of the project;
  - b) a copy of this approval and any future modification to this approval;
  - c) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project;
  - d) a copy of each plan, report, or required monitoring program under this approval; and
  - e) details of the outcomes of compliance reviews and audits of the project.

### Community Consultative Committee

- 4.2A The Proponent shall establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be established and operated in accordance with any applicable CCC guideline.

#### Notes:

- The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with the consent.
- The CCC should be comprised of an independent chair and appropriate representation from the Proponent, Council and the local community.

### Community Information Plan

- 4.3 Prior to the commencement of construction, the Proponent shall prepare and implement a **Community Information Plan** which sets out the community communications and consultation processes to be undertaken during construction and operation of the project. Hard copies are to be made available to dwellings within 3km of the Project upon request (otherwise on Proponent's web-site). The Plan shall include but not be limited to:
- a) procedures to inform the local community of planned investigations and Construction activities, including blasting works;
  - b) procedures to inform the relevant community of Construction traffic routes and any potential disruptions to traffic flows and amenity impacts;
  - c) procedures to consult with local landowners with regard to Construction traffic to ensure the safety of livestock and to limit disruption to livestock movements;
  - d) procedures to inform the community where work has been approved to be undertaken outside the normal Construction hours, in particular noisy activities;
  - e) procedures to inform and consult with those landowners who are eligible for landscaping on their property as determined under condition 2.1 of this approval;
  - f) procedures to notify relevant landowners of the process available to review potential impacts on radio and television transmission; and
  - g) procedures to notify relevant landowners of the process available to review potential impacts on aerial spraying.

### Complaints Procedure

- 4.4 Prior to the commencement of construction of the project, the Proponent shall ensure that the following are available for community complaints for the life of the project (including construction and operation):
- a) a 24 hour telephone number on which complaints about construction and operational activities at the site may be registered;
  - b) a postal address to which written complaints may be sent; and
  - c) an email address to which electronic complaints may be transmitted.

The telephone number, the postal address and the e-mail address shall be advertised in a newspaper circulating in the locality on at least one occasion prior to the commencement of construction and at six-monthly intervals for two years following commencement of operation of the project. These details shall also be provided on the Proponent's internet site. The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public.

- 4.5 The Proponent shall record details of all complaints received through the means listed under condition 4.4 of this approval in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:
- a) the date and time, where relevant, of the complaint;
  - b) the means by which the complaint was made (telephone, mail or email);
  - c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
  - d) the nature of the complaint;
  - e) any action(s) taken by the Proponent in relation to the complaint, including timeframes for implementing the action;
  - f) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken; and
  - g) the Complaints Register is to be made available to the public on request. Any unresolved dispute is to be referred to the **Secretary** for determination.

The complaints Register shall be made available for inspection by the **Secretary** upon request.

- 4.6 The Proponent shall provide an initial response to any complaints made in relation to the project during construction or operation within 48 hours of the complaint being made. The response and any subsequent action taken shall be recorded in accordance with condition 4.5.



## Community Enhancement Program

- 4.7 Prior to the commencement of construction of the project, the Proponent shall prepare and submit for the approval of the **Secretary**, a **Community Enhancement Program** with the aim of funding community enhancement measures to the benefit of the local community, in particular in the immediate vicinity of the project. 50% of the annual contribution specified by this condition will be allocated to enhancement measures identified within 5km of the Project and the other 50% will be allocated to the remainder of the Glen Innes Community.

The Community Enhancement Program shall be developed in consultation with the Council and the local community, including the Glen Innes Landscape Guardians Inc, and provide details of:

- a) the process by which the program's fund would be administered, including mechanisms for accounting and reporting;
- b) how measures and initiatives to be funding by the program would be identified, assessed, prioritised and implemented over the life of the project; and
- c) any other terms agreed to by the parties.

The Proponent shall each year contribute the sum of \$75,000 to the Community Enhancement Program, commencing upon commissioning of the project until the end of its life. The contribution shall be adjusted annually to take account of any increase in the Consumer Price Index (All Groups Index for Sydney) over time, commencing at the September 2010 quarter.

If the Proponent and council cannot agree on the terms of administration or implementation of the community enhancement program, either party may refer the matter to the **Secretary's** determination for resolution at any time. The **Secretary's** determination of the matter will be final and binding on the parties.

## 5. COMPLIANCE TRACKING PROGRAM

- 5.1 Prior to the commencement of construction, the Proponent shall develop and implement a **Compliance Tracking Program** for the project, to track compliance with the requirements of this approval during the construction and operation of the project and shall include, but not necessarily limited to:
- a) provisions for periodic reporting of the compliance status to the **Secretary** including at least prior to the commencement of construction of the project, prior to the commencement of operation of the project and within two years of operational commencement;
  - b) a program for independent environmental auditing in accordance with *AS/NZ ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing*;
  - c) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance;
  - d) mechanisms for recording environmental incidents and actions taken in response to those incidents;
  - e) provisions for reporting environmental incidents to the **Secretary** during construction and operation; and
  - f) 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.

## 6. ENVIRONMENTAL MANAGEMENT

### Environmental Representative

- 6.1 Prior to the commencement of any construction or operational activities, or as otherwise agreed by the **Secretary**, the Proponent shall nominate for the approval of the **Secretary** a suitably qualified and experienced Environmental Representative(s) independent of the design, construction and operation personnel. The Proponent shall engage the Environmental Representative(s) during any construction activities, and throughout the life of the project, or as otherwise agreed by the **Secretary**. The Environmental Representative(s) shall be the Proponent's principal point of advice in relation to the environmental performance of the project and shall have responsibility for:
- a) overseeing the implementation of all environmental management plans and monitoring programs required under this approval, and advise the Proponent upon the achievement of these plans/programs;
  - b) considering and advising the Proponent on its compliance obligations against all matters specified in the conditions of this approval, the Statement of Commitments, permits and licences; and
  - c) having the authority and independence to recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts, and, failing the effectiveness of such steps, to recommend to the Proponent that relevant activities are to be ceased as soon as reasonably practicable if there is a significant risk that an adverse impact on the environment will be likely to occur; and
  - d) reporting to the **Secretary** any non-compliances identified in relation to the environmental performance of the project and general environmental requirements of these conditions.

## Construction Environmental Management Plan

- 6.2 The Proponent shall prepare and implement a **Construction Environmental Management Plan** in accordance with the *Guideline for the Preparation of Environmental Management Plans* (DUAP, 2004) or its latest revision. The Plan shall include but not be necessarily be limited to:
- a) a description of all activities to be undertaken on the site during construction including an indication of stages of construction, where relevant;
  - b) statutory and other obligations that the Proponent is required to fulfil during construction including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
  - c) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan;
    - viii) measures to monitor and minimise soil erosion on local black clay soils and the discharge of sediment and other pollutants to lands and/ or waters during construction activities, particularly during any construction works at or near drainage lines;
    - ix) details of water sources to be used in consultation with **DPI Water** (including interactions with private landowner water entitlements where water is to be sourced from private property, volume of water to be used, and licensing and permit requirements);
    - x) details of the amount and source of spoil to be used during construction in consultation with Council;
    - xi) measures to monitor and manage dust emissions; and
    - xii) measures to mitigate and manage bushfire hazards .
  - d) a description of the roles and responsibilities for all relevant employees involved in the construction of the project;
  - e) complaints handling procedures as identified in conditions 4.4 to 1.1; and
  - f) the Management Plans listed under condition 6.3 of this approval.

The Plan shall be submitted for the approval of the **Secretary** no later than one month prior to the commencement of any construction works associated with the project, or within such period otherwise agreed by the **Secretary**. Construction works shall not commence until written approval has been received from the **Secretary**. Upon receipt of the **Secretary's** approval, the Proponent shall make the Plan publicly available as soon as practicable.

- 6.3 As part of the Construction Environmental Management Plan required under condition 6.2 of this approval, the Proponent shall prepare and implement the following Management Plans:
- a) a **Noise Management Plan** to detail measures to minimise noise emissions associated with the construction of the project. The Plan shall include, but not necessarily be limited to:
    - i) identification of all major sources of noise that may be emitted as a result of the construction of the project;
    - ii) specification of the noise criteria as it applies to a particular activity;
    - iii) identification and implementation of best practice management techniques for minimisation of noise and vibration emissions;
    - iv) an assessment of how any proposed blasting will meet the blasting criteria in this Approval (Condition 2.11 and 2.12);
    - v) procedures for the monitoring of noise emissions; and
    - vi) description of the procedures to be undertaken if any non-compliance is detected.
  - b) a **Traffic Management Plan** to outline measures for the management and coordination of road works required under this approval and to minimise potential conflicts between different user groups. The Plan shall be prepared in consultation with the **RMS** and Council and shall include, but not necessarily be limited to:
    - i) procedures for the construction and maintenance of the construction site entrance along the Gwydir Highway;
    - ii) details of measures to minimise interactions between the project and other users of the roads such as the use of fencing, lights, barriers, traffic diversions etc;
    - iii) procedures for informing the public where any road access will be restricted as a result of the project;
    - iv) procedures to inform vehicle drivers and Glen Innes business owners of the traffic routes to be used by heavy vehicles associated with the project;
    - v) procedures to manage construction traffic to ensure the safety of livestock and to minimise disruption to livestock, and school children and limit disruption to school bus timetables;
    - vi) speed limits to be observed along routes to and from the site and within the site;
    - vii) minimum requirements for vehicle maintenance to address noise and exhaust emissions, particularly along roads in close proximity to residences; and
    - viii) details of the expected behavioural requirements for vehicle drivers travelling to and from the site and within the site.
  - c) a **Flora and Fauna Management Plan** to outline measures to protect and minimise loss of native vegetation and native fauna habitat as a result of construction of the project. The Plan shall include, but not necessarily be limited to:
    - i) plans showing terrestrial vegetation communities; important flora and fauna habitat areas; locations where threatened species, have been recorded or are likely to occur; and areas to



- be cleared. The plans shall also identify vegetation adjoining the site where this contains important habitat areas and/or threatened species, populations or ecological communities;
- ii) methods to manage impacts on flora and fauna species and their habitat which may be directly or indirectly affected by the project, such as location of fencing, procedures for clearing of vegetation or soil and procedures for re-locating hollows or installing nesting boxes; and
- iii) rehabilitation details, and a program for reporting on the effectiveness of terrestrial flora and fauna management measures. Management methods shall be reviewed where found to be ineffective.

### Operation Environmental Management Plan

- 6.4 The Proponent shall prepare and implement an **Operation Environmental Management Plan** in accordance with the *Guideline for the Preparation of Environmental Management Plans* (DUAP, 2004) or its latest revision. The Plan shall include but not necessarily be limited to:
- a) identification of all statutory and other obligations that the Proponent is required to fulfil in relation to the operation of the development, including all consents, licences, approvals and consultations;
  - b) a management organisational chart identifying the roles and responsibilities for all relevant employees involved in the operation of the project;
  - c) overall environmental policies to be applied to the operation of the project;
  - d) standards and performance measures to be applied to the project, and means by which environmental performance can be periodically monitored, reviewed and improved, (where appropriate) and what actions would be taken in the case that non-compliance with the requirements of this approval are identified. In particular the following environmental performance issues shall be addressed:
    - i) bushfire hazard and risk management; and
    - ii) management and maintenance of offsets;
  - e) the environmental monitoring requirements outlined under this approval;
  - f) complaints handling procedures as identified in conditions 4.4 to 1.1;
  - g) the Management Plans listed under condition 6.5 of this approval; and
  - h) details of how sector management would be used and monitored to ensure that operational noise criteria and shadow flicker 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 of the project or within such period as otherwise agreed by the **Secretary**. Operation shall not commence until written approval has been received from the **Secretary**. Upon receipt of the **Secretary's** approval, the Proponent shall make the Plan publicly available as soon as practicable.

- 6.5 As part of the **Operational Environmental Management Plan** required under condition 6.4, the Proponent shall prepare and implement the following management plans:
- a) a **Noise Management Plan** to outline measures to minimise noise emissions from the operation of the project. The Plan shall include, but not necessarily be limited to:
    - i) details of procedures to ensure ongoing compliance with the operational noise limits specified in this approval as they apply to identified receivers. This shall include identification of monitoring requirements;
    - ii) identification and implementation of best practice management techniques for minimisation of noise emissions where reasonable and feasible;
    - iii) measures to be undertaken to rectify annoying characteristics resulting from the operation of the project such as, but not limited to, infrasound or adverse mechanical noise from component failure; and
    - iv) procedures and corrective actions to be undertaken if non-compliance is detected or in the case of complaints.
  - b) a **Landscape Management Plan** to outline measures to ensure appropriate development and maintenance of landscaping on the site to address the visual impacts arising from the project including, turbines, site access roads, substation and control and facilities building, as far as is reasonable and feasible. The Plan shall be prepared by a qualified landscape architect and meet the requirements of Council.
- 6.6 Within three years of the commencement of operation, and at least every three years thereafter, unless otherwise agreed by the **Secretary**, the Proponent shall undertake a formal review of the Operation Environmental Management Plan. The review shall ensure that the Plan is up-to-date and all changes to procedures and practices since the previous review have been fully incorporated into the Plan. The Proponent shall notify the **Secretary** of the completion of each review, and shall supply a copy of the updated Plan on request.

## 7. ENVIRONMENTAL REPORTING

### Incident Reporting

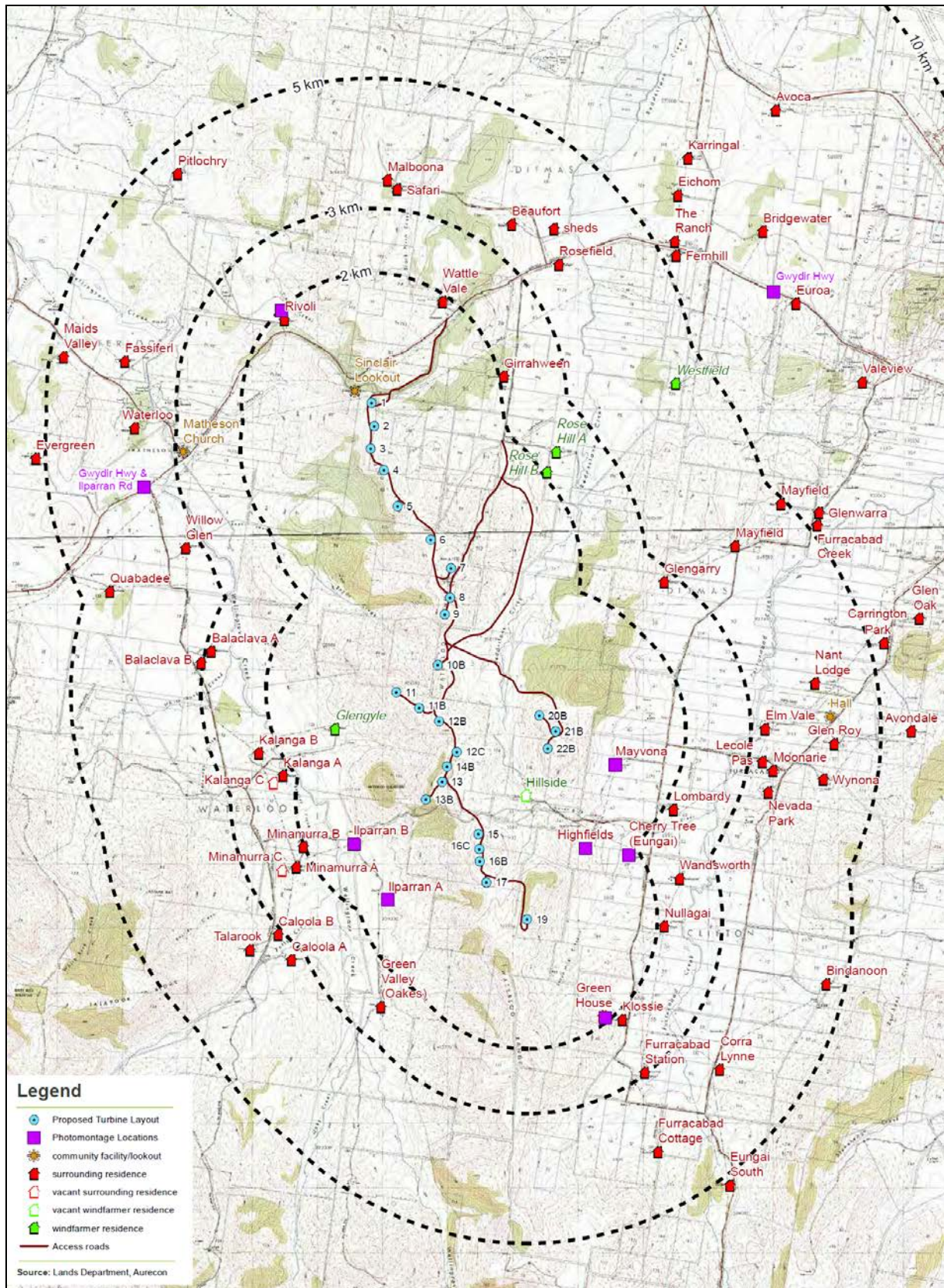
- 7.1 The Proponent shall notify the **Secretary** and any relevant Government authority of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Proponent shall provide written details of the incident to the **Secretary** within seven days of the date on which the incident occurred.

- 7.2 The Proponent shall meet the requirements of the **Secretary** to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition 7.1 of this approval, within such period as the **Secretary** may require.

**APPENDIX 1  
SCHEDULE OF LAND**

<i><b>Property</b></i>	<i><b>Lot/DP</b></i>
1	72/753274
	89/753274
	Pt 90/753319
	86/753319
	105/753319
	2/562615
2	1/1096761
	2/508195
	116/753270
	118/753270
	2/508196
3	1332/1004132
4	1331/1004132
5	117/753270
	2/596311
6	1/562615
7	Wattle Vale Travelling Stock Route (TSR) 67474 including the former Gwydir Highway alignment

## APPENDIX 2 PROJECT LAYOUT





## APPENDIX 3 NOISE COMPLIANCE ASSESSMENT

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

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  $L_{eq(10\text{minute})}$  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 144 minutes during any 24 hour period. 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).

### PART B: NOISE COMPLIANCE ASSESSMENT

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

1. The noise criteria in condition 2.16 are to apply under all meteorological conditions.

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

2. The noise criteria in condition 2.21 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.