

## APPENDIX A - GLOSSARY OF ACOUSTIC TERMS

The following is a brief description of the technical terms used to describe noise to assist in understanding the technical issues presented.

Adverse Weather	Weather effects that enhance noise (that is, wind and temperature inversions) that occur at a site for a significant period of time (that is, wind occurring more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of the nights in winter).
Ambient Noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.
Assessment Period	The period in a day over which assessments are made.
Assessment Point	A point at which noise measurements are taken or estimated. A point at which noise measurements are taken or estimated.
Background Noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L90 noise level (see below).
Decibel [dB]	The units that sound is measured in. The following are examples of the decibel readings of every day sounds: 0dB The faintest sound we can hear 30dB A quiet library or in a quiet location in the country 45dB Typical office space. Ambience in the city at night 60dB CBD mall at lunch time 70dB The sound of a car passing on the street 80dB Loud music played at home 90dB The sound of a truck passing on the street 100dB The sound of a rock band 115dB Limit of sound permitted in industry 120dB Deafening
dB(A):	A-weighted decibels. The ear is not as effective in hearing low frequency sounds as it is hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise is measured using the A filter.
Frequency	Frequency is synonymous to pitch. Sounds have a pitch which is peculiar to the nature of the sound generator. For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency or pitch can be measured on a scale in units of Hertz or Hz.
Impulsive noise	Having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise.
Intermittent noise	The level suddenly drops to that of the background noise several times during the period of observation. The time during which the noise remains at levels different from that of the ambient is one second or more.
Lmax	The maximum sound pressure level measured over a given period.
Lmin	The minimum sound pressure level measured over a given period.

L1	The sound pressure level that is exceeded for 1% of the time for which the given sound is measured.
L10	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
L90	The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A).
Leq	The "equivalent noise level" is the summation of noise events and integrated over a selected period of time.
Reflection	Sound wave changed in direction of propagation due to a solid object obscuring its path.
SEL	Sound Exposure Level (SEL) is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain Leq sound levels over any period of time and can be used for predicting noise at various locations.
Sound	A fluctuation of air pressure which is propagated as a wave through air.
Sound Absorption	The ability of a material to absorb sound energy through its conversion into thermal energy.
Sound Level Meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound Pressure Level	The level of noise, usually expressed in decibels, as measured by a standard sound level meter with a microphone.
Sound Power Level	Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power.
Tonal noise	Containing a prominent frequency and characterised by a definite pitch.

## APPENDIX B - PROJECT APPROVAL FOR THE CAPITAL WIND FARM

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# Project Approval

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

I, the Minister for Planning, approve the project referred to in Schedule 1, subject to the conditions in Schedule 2.

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.

Modification 1 indicated in red

Modification 2 indicated in green

Modification 3 indicated in yellow (NB – fully superseded by later modifications)

Modification 4 indicated in blue

Modification 5 indicated in violet

Frank Sartor MP  
Minister for Planning

Sydney

2006

File No: S04/01018-3

### SCHEDULE 1

<b>Application No:</b>	05_0179
<b>Proponent:</b>	Renewable Power Ventures Pty Ltd
<b>Approval Authority:</b>	Minister for Planning.
<b>Land:</b>	Lot 80 in DP 754819, Lot 10 in DP 237079, Lot 11 in DP 237079, Lot 17 in DP 535180, No 414 Book 2073, No.56 Book 1886, Vol 6429 Fol 101, Lot 1 in DP 658449, Lot 2 in DP 720169, Lot 5 in DP 837873, Lot 76 in DP 754919, Lot 78 in DP 754919, Lot 79 in DP 754919, Lot 48 in DP 754877, Lot 45 in DP754877, Lot 16 in DP535180, Lot 18 in DP535179, Lot 48 in DP754877, Crown Road Reserves, Osborne Trig Reserve.
<b>Project:</b>	The construction and operation of a wind farm comprising 67 x 2.1 megawatt wind turbine generators, an electrical substation to facilitate connection to an existing TransGrid 330 000 volt transmission line, a facilities building, temporary and permanent wind monitoring towers, underground cables, a

twelve kilometre internal overhead power line, and access tracks and works.

## SCHEDULE 2

In these conditions, except in so far as the context or subject-matter otherwise indicates or requires, the following terms have the meanings indicated:

Act	<i>Environmental Planning and Assessment Act, 1979</i>
AHD	Australian Height Datum
BCA	Building Code of Australia
CASA	Civil Aviation Safety Authority
Commissioning	Commencement of testing and connection of any individual turbine(s) and may include concurrent on-going construction activities
CEMP	Construction Environmental Management Plan
Construction	Any activity requiring a Construction Certificate, the laying of a slab or significant excavation work
Councils	Goulburn Mulwaree Council and Palerang Council
dB(A)	Decibel (A-weighted scale)
Department	NSW Department of Planning
DEC	NSW Department of Environment and Conservation (incorporates the former NSW Environment Protection Authority and National Parks and Wildlife Service)
Development	The development to which this Approval applies, the scope of which is described in the documents listed under Condition No. 2 of this Approval
Director General	Director General of the NSW Department of Planning, or delegate
Dust	Any solid material that may become suspended in air or deposited
EIS	<i>Woodlawn Wind Farm Environmental Impact Statement</i> (Volumes 1 & 2) prepared by URS, dated September 2004 and as revised by a report entitled <i>Assessment of Revised Transmission Line Option: Woodlawn Wind Farm</i> prepared by URS, dated 11 February 2005
EPA	NSW Environment Protection Authority (now incorporated into the DEC)
EPL	Licence issued under the <i>Protection of the Environment Operations Act, 1997</i>
ER	Environmental Representative
L <sub>Aeq</sub> (10-minute)	Equivalent average sound pressure level that is measured over a 10 minute period
Lin Peak	Linear Peak
Minister	NSW Minister for Planning, or delegate
OEMP	Operational Environmental Management Plan
Operation	Within three months of the commencement of Commissioning, unless otherwise agreed to by the Director General

Premises	Sub-areas of the Site, as consistent with the relevant DEC/EPA EPL.
Principal Certifying Authority	The Minister or an accredited certifier, appointed under section 109E of the Act, to issue a Part 4A Certificate as provided under Section 109C of the Act
Proponent	Renewable Power Ventures
Publicly Available	Available for inspection by a member of the general public (for example available on an internet site or at a display centre)
Reasonable and Feasible	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 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.
Regulation	<i>Environmental Planning and Assessment Regulation, 2000</i>
Relevant Government Agencies	Department of Natural Resources, Lands Department
RFS	Rural Fire Service
RTA	Roads and Traffic Authority
SA Guidelines	The South Australian Environmental Protection Authority's <i>Wind Farms: Environmental Noise Guidelines (2003)</i>
Site	The land to which this Approval applies

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## GENERAL CONDITIONS

### Obligations to Minimise Harm to the Environment

- 1 The Proponent must implement all practicable measures to prevent and minimise any harm to the environment that may result from the Construction, Commissioning, Operation and decommissioning of the Development.

### Scope of Development

- 2 The Proponent shall carry out the development generally in accordance with the following documents:
  - (a) *Capital Wind Farm – Environmental Assessment* Volumes 1 and 2 dated February, 2006 prepared by Connell Wagner;
  - (b) Submissions Report contained in the following letters received from Renewable Power Ventures to the Department of Planning:
    - 26 May 2006 response to CASA's submission;
    - 26 May 2006 response to Canberra Ornithologists Group's submission;
    - 26 May 2006 response to DEC's submission;
    - 26 May 2006 response to the summary of public submissions prepared by the Department;
    - 28 May 2006 response to Goulburn Mulwaree Council's submission;
    - 28 May 2006 response to Palerang Council's submission;
  - (c) *Preferred Project Report* contained in a letter from Renewable Power Ventures to the Department dated 30 May 2006;
  - (d) The modification request dated 6 March 2008 and accompanying report titled *Capital Wind Farm – Supplementary Environmental Assessment* dated March 2008 prepared by Connell Wagner;
  - (e) The modification request dated 7 November 2008 and accompanying report titled *Capital Wind Farm – Supplementary Environmental Assessment* dated November 2008 prepared by Connell Wagner;
  - (f) The modification request dated 22 December 2009 and accompanying documentation comprising: a letter from Suzlon Energy Australia Pty Ltd to the Department of Planning, dated 12 November 2009, an email from Suzlon Energy Australia Pty Ltd to the Department of Planning, dated 26 November 2009 which includes a map indicating the location of the laydown areas, sample sketches of the layout, and the Route Survey prepared by Nationwide Transport Solutions for Trans Pacific Projects For the Transport of WTG Components for Capital Wind Farm, Bungendore.
  - (g) The Conditions of Approval.

If there is any inconsistency between the Conditions of Approval and a document listed above, the Conditions of Approval shall prevail to the extent of the inconsistency. If there is any inconsistency between documents listed above (other than the Conditions of Approval) then the most recent document shall prevail to the extent of the inconsistency.

## Statutory Requirements

- 3 The Proponent must ensure that all necessary licences, permits and approvals are obtained and kept up-to-date as required throughout the life of the Development. None of the Conditions of Approval remove the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.

## Lapsing of the Approval

- 4 This Approval lapses 3 years after the date of the Minister's Approval unless the Proponent has demonstrated to the satisfaction of the Director General, that work for the purposes of this Approval has been completed on the land to which this Approval applies 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) facilities building construction;
  - (c) 33 000 to 330 000 volt electrical substation construction;
  - (d) internal overhead transmission line construction; or
  - (e) civil works associated with the construction of the foundations for the wind turbine footings.

## Dispute Resolution

- 5 In the event that a dispute arises between the Proponent and Council or the Proponent and a public authority other than the Department, in relation to a specification or requirement applicable under this Approval, the matter must be referred by either party to the Director General, or if not resolved, to the Minister, whose determination of the dispute must be final and binding on all parties. For the purpose of this condition, "public authority" has the same meaning as provided under Section 4 of the Act.

Note: Section 121 of the Act provides mechanisms for resolution of disputes between the Department, the Director General, councils and public authorities.

## Provision and Protection of Public Infrastructure

- 6 The Proponent must:
  - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
  - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the Development.

Note: The Proponent must ensure that all works are carried out in accordance with the Act, the Regulation, the *Local Government Act 1993 (Approvals) Regulations*, and the BCA.

## Planning Agreement

- 7 The Proponent must, by 14<sup>th</sup> December, 2007, unless another date is agreed to by the Director-General, enter into a Planning Agreement with Palerang Council, in accordance with Section 93F of the Act. The Planning Agreement must address the upgrading of

Taylor's Creek Road post construction of the wind farm, in a manner consistent with Palarang Council's resolution 309/2007, dated 12<sup>th</sup> July 2007.

## Compliance

### *General*

- 8 The Proponent must be responsible for environmental impacts resulting from the actions of all persons on-site, including contractors, subcontractors and visitors.
- 9 The Director General may require update report(s) on compliance with all, or any part, of the Conditions of Approval. The report (s) must meet the requirements of the Director General and be submitted within such period as the Director General may require.
- 10 The Proponent must meet the requirements of the Director General in respect of the implementation of any measure necessary to ensure compliance with the Conditions of Approval, and general consistency with the documents listed under Condition No. 2 of this Approval. The Director General may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the Conditions of Approval, within such time as the Director General may require.

### *Pre-Construction Compliance Report*

- 11 The Proponent must submit a *Pre-Construction Compliance Report* to the Director General at least two weeks prior to the commencement of construction (or within a time agreed to by the Director General). The *Pre-Construction Compliance Report* must include details of:
  - (a) how the Conditions of Approval required to be addressed prior to construction have been complied with;
  - (b) when each relevant condition of this Approval was complied with, including submission dates of any required report and/or approval dates; and
  - (c) any approvals or licences required to be issued by relevant Government Agencies prior to the commencement of construction.

### *Construction Compliance Report*

- 12 The Proponent must provide the Director General with a *Construction Compliance Report* within six weeks of the end of the first six months of construction (or at any other time interval agreed to by the Director General). The Environmental Representative must certify the adequacy of the report before it is submitted to the Director General. The *Construction Compliance Report* must be made publicly available and include:
  - (a) information on compliance with the *Construction Environmental Management Plan* (CEMP) of Condition of Approval No. 24 and the Conditions of Approval;
  - (b) information on compliance with any approvals or licences issued by Relevant Government Agencies for Construction;

- (c) information on the implementation and effectiveness of environmental controls. The assessment of effectiveness should be based on a comparison of actual impacts against performance criteria identified in the CEMP;
- (d) a summary and analysis of environmental monitoring results;
- (e) the number and details of any complaints, including a summary of the main areas of complaint, action taken, response given and intended strategies to reduce recurring complaints;
- (f) details of any review and amendments to the CEMP resulting from Construction during the reporting period; and
- (g) any other matter relating to compliance with the Conditions of Approval or as requested by the Director General.

#### *Pre-Operation Compliance Report*

- 13 The Proponent must submit a *Pre-Operation Compliance Report* to the Director General at least two weeks prior to the commencement of Operation (or within a time agreed to by the Director General). The *Pre-Operation Compliance Report* must include details of:
- (a) how the Conditions of Approval required to be addressed prior to commencement of Operation have been complied with;
  - (b) when each relevant condition of this Approval was complied with, including submission dates of any required report and/or approval dates; and
  - (c) any approvals or licences required to be issued by Relevant Government Agencies prior to the commencement of Operation.

#### **Construction and Part 4A Certification**

- 14 Prior to the commencement of Construction, the Proponent must erect at least two signs in a prominent place at the site boundary where the signs can be viewed from the nearest public place. The signs must indicate:
- (a) the name, address and telephone number of the Principal Certifying Authority;
  - (b) the name of the person in charge of the construction site and telephone number at which the person may be contacted outside working hours; and
  - (c) a statement that unauthorised entry to the construction site is prohibited.

The signs must be maintained for the duration of construction works, and must be removed as soon as practicable after the conclusion of the construction works.

Note: The Proponent must ensure that all works are carried out in accordance with the Act, the Regulation, the *Local Government Act 1993 (Approvals) Regulations*, and the BCA.

#### **Environmental Monitoring**

##### *General Monitoring Requirements*

- 15 The Proponent must undertake all monitoring, including recording and reporting of monitoring results, as required under this Approval and as may be specified in an Environmental Protection License (EPL) for the Development.
- 16 The results of any monitoring required under this Approval must be:

- (a) recorded and maintained in a legible form, or in a form which can be readily reduced to a legible form;
  - (b) kept for at least 4 years after the monitoring or event to which they relate took place; and
  - (c) produced in a legible form to any authorised officer of the DEC or the Department who asks to see them.
- 17 The following records must be kept in respect of any samples required to be collected:
- (a) the date(s) on which the sample was taken;
  - (b) the time(s) at which the sample was collected;
  - (c) the location at which the sample was taken (including, if relevant, a description of the DEC identification point); and
  - (d) the name and qualifications of the person who collected the sample.

### **Environmental Impact Audits**

#### *Environmental Impact Audit Report – Construction*

- 18 An *Environmental Impact Audit Report - Construction* must be prepared and submitted to the Director General within three months of Construction completion, or at any other time interval agreed to by the Director General. The Director General may request the Proponent to make the construction audit report available to other Relevant Government Agencies. The *Environmental Impact Audit Report - Construction* must:
- (a) identify the major environmental controls used during Construction and assess their effectiveness;
  - (b) summarise the main environmental management plans and processes implemented during Construction and assess their effectiveness;
  - (c) identify any innovations in Construction methods used to improve environmental management; and
  - (d) discuss the lessons learned during Construction, including recommendations for future wind farm developments.

#### *Environmental Impact Audit Report - Operation*

- 19 An *Environmental Impact Audit Report - Operation* must be prepared and submitted to the Director General within three (3) months after a 24 month period of Operation and then at any additional periods requested by the Director General. The Director General may request the Proponent to make the operation audit report available to other Relevant Government Agencies and Council. The *Environmental Impact Audit Report - Operation* must:
- (a) be certified by an independent person at the Proponent's expense. The certifier must be approved by the Director General prior to the preparation of the audit report;
  - (b) compare the operation impact predictions made in the Environmental Assessment report and documents identified in Condition 2;
  - (c) assess the effectiveness of implemented mitigation measures and safeguards;

- (d) assess compliance with the systems for operation maintenance and monitoring; and
- (e) discuss the results of consultation with the local community particularly any feedback or complaints.

Where necessary, the results of the audit report must also be used to update the *Operational Environmental Management Plan (OEMP)* of Condition of Approval No. 30. The Proponent must notify the Director General, Relevant Government Agencies and Council of any updates to the OEMP and provide a copy on request.

### **Annual Performance Reporting**

- 20 The Proponent must provide an annual return to the DEC in relation to the development as required by any EPL. In the annual return, the Proponent must:
- (a) provide a summary of complaints relating to the development; and
  - (b) report on compliance with EPL conditions.

## **ENVIRONMENTAL MANAGEMENT**

### **Environmental Representative**

- 21 Prior to the commencement of Construction, the Proponent must nominate a suitably qualified and experienced Environmental Representative(s) (ER) whose appointment requires the approval of the Director General. The Proponent must employ the ER(s) on a full-time basis, or as otherwise agreed by the Director General, during the Construction, and Commissioning. An ER must also be employed during Operation. The ER must be:
- (a) the primary contact point in relation to the environmental performance of the Development;
  - (b) responsible for all management plans and monitoring programs required under this Approval;
  - (c) responsible for considering and advising on matters specified in the Conditions of Approval, and all other licences and approvals related to the environmental performance and impacts of the Development;
  - (d) responsible for receiving and responding to complaints in accordance with this Approval; and
  - (e) 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.

The Proponent must obtain approval from the Director General for changes to the appointment of the ER during Construction. The Proponent must notify the Director General of any changes to the appointment during Operation.

## Greenhouse and Energy Management Strategy

- 22 A *Greenhouse and Energy Management Strategy* must be prepared to ensure the use of non-renewable resources from Construction and Operation is minimised. The strategy must incorporate but not necessarily be limited to:
- (a) design and layout plans to balance the generation and requirement for fill materials, minimising the amount required to be transported to the site from off-site sources;
  - (b) work schedule and methods that minimise equipment idle time and double handling of material;
  - (c) instructions to throttle down and switch off idle construction equipment particularly when trucks are waiting to access the site or while being loaded and unloaded;
  - (d) measures to ensure equipment is regularly and correctly maintained for energy efficient operation;
  - (e) management practices to ensure site office equipment and lights are switched off after hours except for security lighting; and
  - (f) instructions to use local materials and recycled materials (demolition materials, construction materials, paper, glass etc) where appropriate.

22A The *Greenhouse and Energy Management Strategy* must be updated to include the four additional turbines approved under 05\_0179\_MOD2. The updated *Greenhouse and Energy Management Strategy* must be submitted to the Director-General at least one month prior to the commencement of construction of these four additional turbines, or within such a period otherwise agreed by the Director-General.

## Air Quality Management Strategy

- 23 An *Air Quality Management Strategy* must be prepared to control Dust and air emissions resulting from Construction and Operation. The strategy must include but not necessarily be limited to:
- (a) wetting of access tracks with water during dry and wind periods;
  - (b) stabilisation of exposed soils and stockpiles;
  - (c) placement of stockpiles in sheltered locations, where necessary;
  - (d) restrict traffic to defined tracks and roads and implement speed limits; and
  - (e) restoration of disturbed areas as soon as possible.

23A The *Air Quality Management Strategy* must be updated to include the four additional turbines approved under 05\_0179\_MOD2. The updated *Air Quality Management Strategy* must be submitted to the Director-General at least one month prior to the commencement of construction of these four additional turbines, or within such a period otherwise agreed by the Director-General.

## Construction Environmental Management Plan

- 24 The Proponent must prepare and implement a *Construction Environmental Management Plan* (CEMP) in accordance with the Department's publication entitled *Guideline for the Preparation of Environmental Management Plans* (2004) or its latest revision.

The CEMP must be prepared in consultation with the Relevant Government Agencies and Councils, and certified by the ER as being in accordance with the Conditions of Approval.



The CEMP must be submitted for the approval of the Director General at least one month prior to the commencement of Construction, or within such a period otherwise agreed by the Director General.

- 25 Site preparation and Construction associated with the Development must not commence until written approval for the CEMP has been received from the Director General. Upon receipt of the Director General's approval, the Proponent must supply a copy of the CEMP to the DEC and Councils as soon as practicable.

25A The CEMP must be updated to include the four additional turbines approved under 05\_0179\_MOD2. The updated CEMP must be submitted to the Director-General at least one month prior to the commencement of construction of these four additional turbines, or within such a period otherwise agreed by the Director-General. Construction associated with the four additional turbines must not commence until written approval for the updated CEMP has been received from the Director-General.

#### *Traffic and Transport Management Sub Plan*

- 26 As part of the CEMP, a *Construction Traffic and Transport Management Sub Plan* must be prepared in consultation with Goulburn Mulwaree Council, Palerang Council, the RTA and NSW Police. The sub plan must:

- (a) include the mitigation measures outlined in Section 9.5 of the Environmental Assessment report;
- (b) sealing the approaches to and intersection of Taylors Creek Road and Western Leg Road prior to construction commencing;
- (c) identify development standards to be met for site access road entrances off Taylors Creek Road, Western Leg Road, and the existing entrance off Bungendore Road;
- (d) provide engineering design drawings for proposed works in public roads to Palerang Council and/or the RTA;
- (e) develop standards for all private access roads including the road to the facilities building;
- (f) provide parking and a turning area adjacent to the facilities building;
- (g) provide effective permanent drainage works within the properties in the vicinity of each entrance to divert stormwater away from driveways and away from public roads;
- (h) identify designated transport routes for heavy vehicles to the Development Site;
- (i) include measures to minimise traffic disruption through Goulburn and in the vicinity of the Development Site;
- (j) include measures to minimise disturbance from traffic noise;
- (k) include measures to manage Construction traffic to ensure the safety of:
  - i livestock and limit disruption to livestock movement;
  - ii equestrian activities; and
  - iii school children and limit disruption to school bus timetables;
- (l) include a community information program to inform the community of traffic disruptions resulting from the construction program; and
- (m) outline a complaints management procedure for traffic impacts.

## *Flora and Fauna Management Sub Plan*

- 27 A *Flora and Fauna Management Sub Plan* must be prepared as part of the CEMP. The sub plan must be prepared in consultation with the DEC and include:
- (a) plans showing terrestrial vegetation communities; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities were recorded; and areas to be cleared. The plans must also identify vegetation adjoining the Development where this contains important habitat areas and/or threatened species, populations or ecological communities;
  - (b) methods to manage impacts on flora and fauna species (terrestrial and aquatic) and their habitat which may be directly or indirectly affected by the Development. These must include:
    - i procedures for vegetation clearing, soil management and minimising other habitat damage (terrestrial and aquatic) during Construction;
    - ii methods to protect vegetation both retained within, and also adjoining, the Development from damage during Construction;
    - iii a habitat tree management program including fauna recovery procedures and habitat maintenance (e.g. relocating hollows or installing nesting boxes);
    - iv where possible, and where consistent with DEC requirements, strategies for re-using in rehabilitation works individuals of any threatened plant species that would be otherwise be destroyed by the Development; and
    - v performance criteria against which to measure the success of the methods;
  - (c) rehabilitation details including:
    - i identification of locally native species to be used in rehabilitation and landscaping works, including flora species suitable as a food resource for threatened fauna species;
    - ii the source of all seed or tube stock to be used in rehabilitation and landscaping works including the identification of seed sources within the Site. Seed of locally native species within the Development Site should be collected before Construction commences to provide seed stock for revegetation;
    - iii methods to re-use topsoil (and where relevant subsoils) and cleared vegetation; and
    - iv measures for the management and maintenance of all preserved, planted and rehabilitated vegetation (including aquatic vegetation);
  - (d) the mitigation measures outlined in Section 7.6 of the Environmental Assessment report which includes the construction of stock proof fencing around the high value Yellow Box Woodland and secondary grassland to the south-east of the Hammond Hill site.
  - (e) a Weed Management Strategy including:
    - i identification of weeds within the Development Site and adjoining areas;
    - ii weed eradication methods and protocols for the use of herbicides;
    - iii methods to treat and re-use weed infested topsoil; and
    - iv strategies to control the spread of weeds during Construction; and
  - (f) a program for reporting on the effectiveness of terrestrial flora and fauna management measures against the identified performance criteria. Management methods must be reviewed where found to be ineffective.

### *Construction Soil and Water Management Sub Plan*

- 28 A *Construction Soil and Water Management Sub Plan* must be prepared as part of the CEMP. The sub plan must be prepared in consultation with Relevant Government Agencies and Councils. The sub plan must:
- (a) incorporate the mitigation measures identified in Section 5.5.4 of the Environmental Assessment report;
  - (b) where relevant, be consistent with the Department of Land and Water Conservation's *Guidelines for the Planning, Construction, and Maintenance of Tracks* (1994); RTA's *Guidelines for the Control of Erosion and Sedimentation in Roadworks*, the DIPNR *Constructed Wetlands Manual* and Landcom's manual entitled *Managing Urban Stormwater: Soils and Construction* (2004);
  - (c) identify the Construction activities that could cause soil erosion or discharge sediment or water pollutants from the Development Site;
  - (d) describe management methods to minimise soil erosion or discharge of sediment or water pollutants from the Development Site including a strategy to minimise the area of bare surfaces during Construction;
  - (e) incorporate measures to rehabilitate internal tracks to 5 metres wide following completion of construction;
  - (f) describe the location and capacity of erosion and sediment control measures;
  - (g) identify the timing and conditions under which Construction stage controls will be decommissioned;
  - (h) include contingency plans to be implemented for events such as fuel spills; and
  - (i) identify how the effectiveness of the sediment and erosion control system will be monitored, reviewed and updated.
- 29 An appropriately qualified soil scientist must be consulted according to a schedule identified in the sub plan required in Condition No. 28 to:
- (a) undertake inspections of temporary and permanent erosion and sedimentation control devices;
  - (b) ensure that the most appropriate controls are being implemented;
  - (c) check that controls are being maintained in an efficient condition; and
  - (d) check that controls meet the requirements of any relevant approval and/or licence condition.

### **Operation Environmental Management Plan**

- 30 The Proponent must prepare and implement an *Operation Environmental Management Plan* (OEMP) in accordance with the Department's publication entitled *Guideline for the Preparation of Environmental Management Plans* (2004) or its latest revision. The OEMP must be prepared in consultation with the Relevant Government Agencies and Councils, and must be certified by the ER as being in accordance with the Conditions of Approval. The OEMP is to be submitted for the approval of the Director General no later than one month prior to the commencement of Operation, or within such period otherwise agreed to by the Director General.
- 31 Operation must not commence until written approval of the OEMP has been received from the Director General. Upon receipt of the Director General's approval, the

Proponent must supply a copy of the OEMP to the DEC and Councils as soon as practicable.

*Operation Flora and Fauna Management Sub Plan*

- 32 An *Operation Flora and Fauna Management Sub Plan* must be prepared as part of the OEMP. The sub plan must include:
- (a) plans showing terrestrial vegetation communities, important flora and fauna habitat areas, areas to be protected, and areas to be planted;
  - (b) methods for managing flora and fauna and their habitats which are directly or indirectly affected by the Development;
  - (c) the mitigation measures outlined in Section 7.6 of the Environmental Assessment report; and
  - (d) strategies to control the spread of weeds during Operation.

*Operation Soil and Water Management Sub Plan*

- 33 An *Operation Soil and Water Management Sub Plan* must be prepared as part of the OEMP. The sub plan must:
- (a) include regular inspection of disturbed ground, particularly after rain, to ensure sediment control devices are maintained;
  - (b) incorporate the use of appropriate containment facilities for chemical storage in the control room, bunding around the substation transformer and padmount transformers, and facilities building to prevent discharge to the ground; and
  - (c) include measures to maintain site tracks to prevent erosion and discharge of sediment from the site.

*Bird and Bat Adaptive Management Program*

- 34 A *Bird and Bat Adaptive Management Program* must be prepared as part of the OEMP and undertaken by a suitably qualified expert approved by the Director General and must:
- (a) incorporate monitoring, and a decision matrix that clearly describes how the Proponent will respond to the outcomes of monitoring;
  - (b) incorporate an on-going role for the suitably qualified expert;
  - (c) set out monitoring techniques, taking into account best practice bird and bat monitoring methods for wind farms such as those identified in the current editions of *AusWEA Best Practice Guidelines for the Implementation of Wind Energy Projects in Australia* and *Assessing the Impacts of Windfarms on Birds - Protocols and Data Set Standards*;
  - (d) account for natural and human changes to the surrounding environment that might influence bird and/or bat behaviour such as changes in land use practices, and significant changes in water levels in nearby waterbodies;
  - (e) incorporate a decision making framework that sets out specific actions and when they may be required, to reduce identified impacts on birds and bats;
  - (f) identify 'at risk' bird and bat groups and include monthly censuses of their movements; and

- (g) set out available mitigation measures including, but limited to, those identified in Condition No. 32(c) and commitments outlined in Section 15 of the EA.
- 35 The Proponent must prepare annual reports commencing 12 months from the start of Operation describing the activities undertaken within the *Bird and Bat Adaptive Management Program*. The reports must be prepared within 2 months of the end of the reporting period and be provided to the Director General. The reports must address the:
- (a) outcomes of monitoring;
  - (b) application of the decision making framework;
  - (c) need for mitigation measures;
  - (d) progress with implementation of mitigation measures; and
  - (e) effectiveness of the mitigation measures.
- 36 The Proponent must implement all Reasonable and Feasible mitigation measures where the need for further action is identified through the *Bird and Bat Adaptive Management Program*.

## **COMMUNICATION AND CONSULTATION**

### **Information on the Development**

- 37 The Proponent must make all documents relevant to this Approval, with the exception of that information that may be legitimately claimed is of a confidential commercial nature, Publicly Available at a location on the Development Site convenient for inspection by visitors.
- 38 The Proponent must establish an internet web site before Construction commences and maintain the internet web site until Construction ends. This internet web site must:
- (a) indicate the date of the last update and the frequency of the internet web site updates;
  - (b) contain periodic updates of work progress, consultation activities and planned work schedules;
  - (c) be updated within one working day where significant changes in noise or traffic impacts are anticipated;
  - (d) identify relevant approval authorities and their areas of responsibility;
  - (e) include a list of reports and plans that are Publicly Available under this Approval and details of how these can be accessed;
  - (f) include the contact names and phone numbers of relevant communications staff; and
  - (g) include the 24 hour complaints contact telephone number.
- 39 The Proponent must ensure that the local community and businesses are advised of Construction activities that could cause disruption. Methods to disseminate this information must be identified in the CEMP. Information to be provided must include:
- (a) details of any traffic disruptions and controls;
  - (b) construction of any temporary detours; and

- (c) work approved to be undertaken outside the normal Construction hours, in particular noisy works, before such works are undertaken except for emergency works permitted under Condition of Approval No. 52(c).

### **Complaints Management System**

- 40 Prior to the commencement of Construction, the Proponent must ensure that the following is available for the life of the Development:
- (a) a postal address to which written complaints may be sent;
  - (b) an e-mail address to which electronic complaints may be transmitted; and
  - (c) a 24-hour telephone contact line. This must provide for:
    - i complaints about operations associated with the development on the Development Site to be followed-up by the DEC with the licensee or a representative of the licensee who can respond at all times to incidents relating to individual premises; and
    - ii construction and operational complaints associated with the Development to be registered by the community.
- 41 The Proponent must keep a legible record of all complaints received in an up-to-date Complaints Register. The Complaints Register must 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 e-mail);
  - (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 any follow-up contact with the complainant; and
  - (f) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register must be made available for inspection on request of the Department or an authorised officer of the DEC. The record of a complaint must be kept for at least four years after the complaint was made.

### **VISUAL AMENITY**

#### **General**

- 42 The Proponent must implement the landscape and visual mitigation measures identified in Section 6.10 of the Environmental Assessment report and include, where appropriate:
- (a) the use of local material for fill to minimise colour contrast;
  - (b) screen plantings around the substation to ensure that no components of the substation are visible;
  - (c) a design for the substation and facilities buildings that fit in with the rural setting;
  - (d) aesthetic uniformity by ensuring the rotor, nacelle, and tower of each turbine look similar and their rotors spin in the same direction;
  - (e) measures to ensure the turbines are spinning when there is wind; and

- (f) good “housekeeping” by managing the site to be free of litter, and ensuring maintenance wastes are disposed of correctly e.g. lube oils.

#### *Off-Site Landscape Sub Plan*

- 43 As part of the OEMP the Proponent must develop and implement an *Off-Site Landscape Sub Plan* to address visual impacts of the proposed development for any owner of an existing or approved residential dwelling with views of turbine(s) located within four kilometres of their dwelling. The *Off-Site Landscape Sub Plan* is to be prepared by a suitably qualified landscape planner approved by the Director General.
- 44 The Proponent must notify in writing all owners of a residential dwelling with views of turbines located within four kilometres of their residential dwelling of its requirement to prepare the *Off-Site Landscape Sub Plan*, prior to the commencement of Commissioning. These owners may request, no later than six months after commencement of Operation, inclusion of their property in the *Off-Site Landscape Sub Plan*.
- 45 The landscape planner will, for each individual residential treatment, identify which screening species to use, where mature stock should be used in order to get the most effect, and how to screen out the wind turbines and still retain at least a partial outlook if desired by the resident. The Proponent must implement all Reasonable and Feasible requirements for the identified landscape works. The *Off-Site Landscape Sub Plan* is to be fully implemented within 18 months of the commencement of Operation.

#### **Signs**

- 46 No advertising or signs are to be mounted on the turbines or placed on the Development Site, except where required for safety purposes. A corporate logo may be placed on the turbines providing it is not distinguishable by the naked eye from any publicly accessible location or from any non associated properties.

#### **Lighting**

- 47 There must be no external night lighting of infrastructure associated with the Development, including the wind turbines, other than low intensity security lighting, unless otherwise agreed by the Director General or required by CASA.

#### **NOISE**

##### **Construction Noise Management Sub Plan**

- 48 A Construction Noise Management Sub Plan must be prepared as part of the CEMP. The sub plan must be prepared in consultation with Councils. The sub plan must:
  - (a) identify all work areas, site compounds and access routes (both private and public);
  - (b) identify the specific activities that will be carried out and associated noise sources at each work area, site compound and access route;

- (c) comply with the construction noise and vibration objectives for sensitive receiver locations based on the EMCM;
- (d) assess the potential noise and vibration from the proposed construction methods (including noise from construction traffic) against the ENCM;
- (e) present an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise impacts where the ENCM objectives are predicted to be exceeded;
- (f) describe management methods and procedures, and specific noise mitigation treatments that will be implemented to control noise and vibration impacts during construction;
- (g) incorporate procedures for notifying residents of construction activities that are likely to affect their noise and vibration amenity; and
- (h) include monitoring to measures noise performance and respond to complaints.

### **Blasting and Vibration**

- 49 The airblast overpressure level from blasting when assessed at a noise sensitive site as defined in the Australian and New Zealand Environment Council – Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration must not exceed:
- (a) 115dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and
  - (b) 120dB (Lin Peak) at any time.
- 50 The ground vibration peak particle velocity from blasting operations when assessed at a noise sensitive site as defined in the Australian and New Zealand Environment Council – Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration must not exceed:
- (a) 5mm/s for more than 5% of the total number of blasts carried out on the Site during each reporting period; and
  - (b) 10mm/s at any time.
- 51 Blasting operations on the Premises may only take place:
- (a) between 9:00am and 5:00pm Monday to Friday inclusive and between 9:00am and 1:00pm Saturday; and
  - (b) at such other times or frequency as may be approved by the DEC.

### **Construction Hours**

- 52 Construction activities associated with the Development, including heavy vehicles entering and exiting the Site, may only be carried out between 7:00 am and 6:00 pm, Monday to Friday inclusive, and between 8:00 am and 1:00 pm on Saturdays. No work is to be carried out on Sundays and Public Holidays. The following activities may be carried out in association with Construction outside of these hours:
- (a) any works that do not cause noise emissions to be audible at any nearby residences not located on the Premises;



- (b) the delivery of materials as requested by Police or other authorities for safety reasons; and
- (c) emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

Any work undertaken outside the specified construction hours, other than those specified in (a) – (c) of this Condition No. 52, must not be undertaken without prior consent of the [Director-General](#).

### Operational Noise Criteria

- 53 Noise generated from the Development must not exceed the equivalent noise level ( $L_{Aeq, 10}$ ) adjusted for any tonality as presented in the tables below.

10m (height)wind speed (m/s)	Noise level $L_{Aeq}$ (10 minute) – at receiver locations*			
	Property described in the EA as Lakoona (G4)	Property described in the EA as Widgemore (G6)	Property described in the EA as La Granja (G10)	Property described in the EA as The Patch (H15)
0-4	35	35	35	35
5	35	35	35	35
6	35	35	35	35
7	35	35	36	35
8	35	35	37	35
9	35	35	37	35
10	35	35	37	35
11	35	35	37	35
12	35	35	37	35

10m (height)wind speed (m/s)	Noise level $L_{Aeq}$ (10 minute) – at receiver locations*			
	Property described in the EA as Wroxham (H24)	Property described in the EA as (E7)		
0-4	35	35		
5	35	35		
6	35	35		
7	35	36		
8	35	36		
9	35	37		
10	35	37		
11	35	37		
12	35	37		

\*Receiver locations as identified in the *Environmental Assessment – Capital Wind Farm Environmental Assessment* prepared by Connell Wagner PPI dated February 2006. If compliance assessments are required at other non-associated residences as identified in the Environmental Assessment, the applicable noise limits are  $L_{Aeq, 10\text{ minute}} 35\text{ dB(A)}$  where the predicted level is below  $L_{Aeq, 10\text{ minute}} 35\text{ dB(A)}$ , and the predicted level is above  $L_{Aeq, 10\text{ minute}} 35\text{ dB(A)}$ . The predicted levels are identified in the aforementioned Environmental Assessment.

- 54 The noise limits applied to the eight properties identified in Condition No. 53 must be applied to all residences that were identified as being 'representative' as described in *Table 1: Representative background sites with similar noise criteria*, Appendix H1 –

Background Noise Monitoring Report found in Volume 2 – Appendices to the Capital Wind Farm Environmental Assessment.

- 55 Noise from the Premises is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise level limits set out in the tables at Condition No. 53.
- 56 The modification factors presented in Section 4 of the *New South Wales Industrial Noise Policy* (NSW EPA, January, 2000), must be applied to the measured noise level where applicable.

### **Noise Compliance Monitoring During Operation**

- 57 The Applicant must prepare a *Noise Compliance Assessment Plan* which must be submitted to the DEC prior to Commissioning of the wind turbines. The *Noise Compliance Assessment Plan* must outline how the *Noise Compliance Assessment*, as described in Conditions Nos. 58-59, will be achieved.
- 58 The *Noise Compliance Assessment* must include, but not be limited to:
- (a) an assessment of the performance of the wind farm against the noise limits contained in Condition No.53.
  - (b) a commitment that noise compliance monitoring must be undertaken within three calendar months of the commissioning of the wind turbines at the locations identified in Condition No. 53<sup>1</sup>. If prevailing meteorological conditions do not allow the required monitoring to be undertaken in this period, the DEC must be notified and an extension of time may be sought; and
  - (c) a requirement that all noise compliance monitoring results are to be submitted to the DEC within one month of completion of the monitoring. The DEC may request that additional noise compliance monitoring be undertaken and completed within a timeframe defined by the DEC.
- 59 In the event that the *Noise Compliance Assessment* indicates that noise from the wind turbines exceeds the noise limits contained in Condition No. 53, the Proponent must investigate and propose the mitigation and management measures that are available to achieve compliance with the noise limits. The *Noise Compliance Assessment* must be undertaken in accordance with the procedures presented in the *SA Guidelines*.

Note: The data obtained using the compliance assessment procedures outlined in the SA Guidelines should be used to establish the noise levels contributed by the wind farm. Other predictive compliance assessment techniques, where these techniques can be justified, may be considered. Whilst not directly applicable to wind farms, the NSW Industrial Noise Policy (INP) may provide additional guidance on predictive compliance assessment techniques.

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<sup>1</sup> The EPA may require the Proponent to repeat the *Noise Compliance Assessment* procedure if the initial *Noise Compliance Assessment* indicates that this is necessary. The EPA may require additional compliance assessment at locations not nominated in Condition No. 53 on the basis of *bona fide* complaint(s).

## Noise Mitigation – Vacant Lots

- 60 Reasonable and Feasible noise mitigation measures are to be provided by the Proponent for no more than one new dwelling, built on any vacant lot legally existing at the date of this Approval, upon which a residential dwelling would be permissible at the same date. Noise mitigation is to be provided if the noise levels from the Development at the approved location of the new residential dwelling would exceed the SA Guidelines.

Note: The intention is that this Condition of Approval does not apply to any potential future subdivision(s) that may be approved after the date of this Approval.

## HERITAGE

### Indigenous Heritage Management

- 61 In the event that skeletal remains, or an Aboriginal object not subject to a Section 90 permit under the *National Parks and Wildlife Act* are identified, all construction activities that will or would have the potential to impact on indigenous heritage item(s) not subject to a Section 90 permit, shall cease until the DEC is consulted and their directions complied with.
- 62 A *Cultural Heritage Management Sub Plan* must be prepared as part of the CEMP. The sub plan must include:
- (a) a targeted subsurface excavation testing program undertaken by a qualified archaeologist and done for the PAD sites 2, 3, 4, and 6<sup>2</sup>;
  - (b) invitations to the local Aboriginal stakeholders to participate in the subsurface testing programme;
  - (c) protocols, established with the local Aboriginal stakeholders, regarding care and storage for any recovered artefacts;
  - (d) measures to protect all the archaeological sites identified in the Environmental Assessment report from construction activities that are carried out in the vicinity of these sites e.g. barrier fencing to confine construction to as small an area as possible and fencing-off certain sites; and
  - (e) protocols that will be observed if any artefacts not previously identified are uncovered during construction including ceasing all work in the vicinity of the object and notifying the DEC to determine an appropriate course of action prior to the re-commencement of work in the vicinity of the item.

### Historical Relics

- 63 In the event that a non-indigenous heritage item is uncovered during Construction, all work in the vicinity of the object must cease and the Proponent must contact the NSW Heritage Council to determine an appropriate course of action prior to the re-commencement of work in the vicinity of the item.

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<sup>2</sup> PAD sites as described in a letter from AUSTRAL Archaeology dated 21 December 2005 and attached to Appendix E of the Environmental Assessment Report (Aboriginal Archaeological and Cultural Heritage Assessment). The letter outlines the test excavation strategy which should be followed for the Capital Wind Farm.

## MISCELLANEOUS REQUIREMENTS

### Spoil and Fill Management

- 64 For the purposes of the Development, imported fill must be Virgin Excavated Natural Material as defined in the Environment Protection Authority's guideline *Assessment, Classification and Management of Liquid and Non-Liquid Wastes*.

### Road Dilapidation Report

- 65 Road dilapidation reports must be prepared, in consultation with Councils, for the construction route where it passes along Cowper Road, Clinton Street, Blackshaw Road, Braidwood Road and Bungendore Road, Collector Road, West Leg Road, and Taylors Creeks Road. These reports must be prepared before Construction commences and after Construction is complete. Copies of the reports must be provided to the relevant roads authority. Any damage resulting from Construction traffic, except that resulting from normal wear and tear, must be repaired at the Proponent's cost. Alternatively the Proponent may negotiate an alternative arrangement for road damage with the relevant roads authority.

### Aviation

- 66 Details of the construction timetable are to be submitted to CASA prior to the commencement of Construction.
- 67 The following details are to be submitted to CASA prior to the commencement of Operation:
- (a) the 'as constructed' coordinates of the wind turbines (in latitude and longitude);
  - (b) the final height in metres AHD for each wind turbine; and
  - (c) the ground level at the base of each of the wind turbines, in metres AHD.
- 68 In the event that required aerial weed control or application of fertiliser is restricted on any property surrounding the Development Site due to the location of turbines, the Proponent must fully fund the cost difference between aerial weed spraying or application of fertiliser and a reasonable alternative application method in the restricted area.

### Hazards

#### *Bushfire Risk*

- 69 As part of the Construction and Operation EMPs, the Proponent must prepare, in consultation with the Taylors Creek Rural Fire Service, a *Bushfire Risk Management Sub Plan* based on the guidelines *Planning for Bushfire Protection* (RFS, 2001 or its latest edition). The sub plan must include:
- (a) details of the bushfire hazards and risks associated with the Development;
  - (b) mitigation measures including contingency plans;

- (c) procedures and programs for liaison and regular drills with the Taylors Creek Rural Fire Service; and
  - (d) procedures for regular fire prevention inspections by the Taylors Creek Rural Fire Service and implementation of any recommendations.
- 70 The Proponent must, prior to commencement of construction, purchase a Cat 7 Fire Tender and give it at no cost to the Taylors Creek Rural Fire Service.

#### *Safety Management System*

- 71 At least two months prior to Commissioning, the Proponent must prepare a report outlining a comprehensive *Safety Management System*, covering all on-site systems related to ensuring the safe Operation. The report must clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. The *Safety Management System* must 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 Development; and
  - (b) an outline of a documented procedure for the management of change.

#### **Electromagnetic Interference**

##### *Television Interference*

- 72 Prior to the erection of any wind turbine on the Development Site, the Proponent must advise in writing, any owner of a residential dwelling located within five kilometres of a proposed wind turbine that an assessment of potential television interference is available to them. If requested by the owner, the Proponent must:
- (a) undertake an assessment of the existing quality of television reception; and
  - (b) reassess the electromagnetic interference to television reception during the first six months of Operation.

Any reassessment must be conducted within three months of a request being made. Residential dwellings located on the Development Site are not included in this condition.

- 73 The Proponent must undertake any Reasonable and Feasible mitigation measures, at its own expense, to rectify any television reception problems identified in the reassessment conducted under Condition No. 72 and attributable to the Development, including but not limited to:
- (a) improving the existing antenna system;
  - (b) installing and maintaining a parasitic antenna system;
  - (c) installing and maintaining an alternative television connection such as a satellite receiving antenna; and
  - (d) providing a land line between the affected receiver and an antenna located in an area of favourable reception.

### *Radio Communication*

- 74 Prior to the erection of any wind turbine on the Development Site, the Proponent must advise in writing the operator(s) of any two-way, fixed radio links crossing the Development Site that, at the request of the operator, the Proponent must:
- (a) undertake an assessment of the existing quality in consultation with the operator(s); and
  - (b) reassess the electromagnetic interference to radio reception during the first six months of Operation.

Any reassessment must be conducted within three months of a request being made.

- 75 The Proponent must undertake any Reasonable and Feasible mitigation measures, at its own expense, to rectify any radio reception problems identified in the reassessment conducted at Condition No. 74 and attributable to the Development, including but not limited to:
- (a) modifying the existing aerial;
  - (b) installing a directional antenna; and
  - (c) installing an amplifier to boost the signal.

### **Community Contributions**

- 76 Prior to the commencement of any construction works the subject of this Approval, payment of a contribution totalling \$17,337.00 covering the provision, upgrade and maintenance of road infrastructure in accordance with the Mulwaree Section 94 Development Contributions Plan 2003-2008, shall be made to Goulburn Mulwaree Council.

This amount will be reviewed annually by the Proponent at the beginning of each financial year, in accordance with the rates applicable in the current version/edition of the relevant Section 94 Plan, based on CPI movements (March to March) with any movement effective from 1 July.

### **Waste Management and Recycling**

- 77 As part of the Construction and Operation EMPs the Proponent must prepare *Waste Management and Re-use Sub Plan(s)*. The sub plan(s) must address the management of wastes during the Construction and Operation stages respectively in accordance with the NSW Government's Waste Reduction and Purchasing Policy. The sub plan(s) must identify requirements for:
- (a) the application of the waste minimisation hierarchy principles of avoid/reduce/re-use/recycle/dispose;
  - (b) minimising the volume of wastewater produced and include, as a minimum, a commitment to install AAA-rated water conservation devices in the control room/facilities building;

- (c) waste handling and storage. The human wastewater management system is to be designed according to the guidelines entitled *On-site Sewage Management for Single Households* and the AS/NZS 1547-2000 - On-site Domestic Wastewater Management;
- (d) disposal of wastes. Specific details must be provided for cleared vegetation, contaminated materials, glass, metals and plastics, hydrocarbons (lubricants and fuels) and sanitary wastes; and
- (e) any waste material that is unable to be re-used, re-processed or recycled, which must be disposed at a facility approved to receive that type of waste.

### **Decommissioning**

- 78 Within one year of decommissioning, the Development Site must be returned, as far as practicable, to its condition prior to the commencement of Construction. All wind turbines and associated above ground structures (i.e. not including turbine foundations) including but not limited to, the substation, the control and facilities building and electrical infrastructure must be removed from the Development Site unless otherwise agreed by the Director General. All other elements associated with the Development, including Development Site roads, must be removed unless otherwise agreed to by the landowner(s).
- 79 If any wind turbine is not used for the generation of electricity for a continuous period of 12 months, it must be decommissioned unless otherwise agreed to by the Director General. The Proponent must keep independently verified annual records of the use of wind turbines for electricity generation. These records must be provided to the Director General upon request. The relevant wind turbine and any associated infrastructure is to be dismantled and removed from the Development Site within 18 months from the date that the wind turbine was last used to generate electricity.
- 80 Prior to the commencement of Construction, the Proponent must provide written evidence to the satisfaction of the Director General, that the lease agreements with the Site landowners have adequate provisions to require that decommissioning occurs in accordance with this Approval.