

Notice of Modification

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I modify the project approval referred to in Schedule 1, as set out in Schedule 2.



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Sydney **24 JULY**

2015

SCHEDULE 1

The project approval (10_0160) for the White Rock Wind Farm Project, granted by the Minister for Planning and Infrastructure's delegate on 10 July 2015.

SCHEDULE 2

1. Replace the description of land in Schedule A with the following:

| | |
|-------|------------------------------|
| Land: | The land shown in Appendix 1 |
|-------|------------------------------|
2. Replace the description of the Project in Schedule A with the following:

| | |
|----------|------------------------------|
| Project: | White Rock Wind Farm Project |
|----------|------------------------------|
3. Update the Table of Contents to reflect the modifications to the approval as a result of this modification.
4. Insert the following definitions in alphabetical order in the definitions table:

| | |
|-----------------|---|
| Decommissioning | The removal of wind turbines and any associated above ground infrastructure |
| Secretary | Secretary of the Department or nominee |
5. Replace the definition of 'Department' in the definitions table with the following:

| | |
|------------|--|
| Department | The Department of Planning and Environment |
|------------|--|
6. Delete the following definitions in the definitions table:

| |
|--|
| Director-General |
| Director-General's Approval or the agreement or satisfaction of the Director-General |
| Sensitive Receiver |
7. Replace all references to 'Director-General' in the project approval with 'Secretary'.

8. Replace the definition of 'EA' in the definitions table with the following:

| | |
|----|---|
| EA | <p><i>White Rock Wind Farm Environmental Assessment</i> (Epuron, April 2011) as amended by:</p> <ul style="list-style-type: none"> • the Submissions Report; and • the Modification Application seeking administrative changes to the conditions of approval, dated 15 June 2015. |
|----|---|
9. Replace the definition of 'EEC' in the definitions table with the following:

| | |
|-----|--|
| EEC | Endangered Ecological Community listed under the <i>Threatened Species Conservation Act 1995</i> |
|-----|--|
10. Replace the definitions of 'Non-associated Receptor' and 'Sensitive Receiver' in the definitions table with the following:

| | |
|--------------------------|---|
| Non-associated residence | Any residence on privately-owned land where the landowner has not reached a financial or in kind agreement with the Proponent in relation to the project. |
|--------------------------|---|
11. Replace condition B1 with the following:

| | |
|----|---|
| B1 | <p>The Proponent shall carry out the project:</p> <ol style="list-style-type: none"> (a) generally in accordance with the EA; and (b) in accordance with the conditions of this approval. |
|----|---|

Note: The general layout of the project is depicted in the figure in Appendix 1.
12. Replace condition B2 with the following:

| | |
|----|--|
| B2 | If there is any inconsistency between the documents referred to in condition B1, the most recent document shall prevail to the extent of any inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency. |
|----|--|
13. Replace condition B3 with the following:

| | |
|----|---|
| B3 | <p>The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:</p> <ol style="list-style-type: none"> (a) any strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with the requirements in this approval; (b) any report, reviews or audits commissioned by the Department regarding compliance with this approval; and (c) the implementation of any actions or measures contained in these documents. |
|----|---|
14. Replace condition C1 with the following:

| | |
|----|---|
| C1 | <p>The Proponent shall:</p> <ol style="list-style-type: none"> (a) minimise the clearing of native vegetation on site; and (b) not clear more than 22 hectares of the Ribbon Gum-Mountain Gum-Snow Gum Grassy Forest/Woodland of the New England Tableland Bioregion EEC on site. |
|----|---|
15. Replace 'sensitive receivers' in condition C17 with 'non-associated residences'.
16. Replace 'development' in condition C24 with 'project'.
17. Replace 'non-associated receptor' in condition C29 with 'non-associated residences'.
18. Replace references to conditions 'B1(a) to B1(c)' in conditions D8(b) and D8(c) with condition 'B1'.
19. Delete 'Director-General of' in conditions E3 and E4.
20. Replace condition E5 with the following:

Construction or Decommissioning Hours

E5 The Proponent shall only undertake construction or decommissioning activities between:

- (a) 7:00am to 6:00pm Mondays to Fridays;
- (b) 8:00am to 1:00pm Saturdays; and
- (c) at no time on Sundays or NSW public holidays.

The following construction activities may be undertaken outside these hours:

- activities that are inaudible at any non-associated residence;
- activities approved under an out-of-hours work (OOHW) protocol (see condition E22(b)(vi));
- the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or
- emergency work to avoid the loss of lives, property and/or prevent environmental harm.

21. Delete the following conditions:

E6

E7

E8

E11

E12

F10

F11

F12

F13

F14

F15

F16

F17

F18

F20

22. Replace condition E9 with the following:

E9 The Proponent shall only carry out blasting between 9am and 5pm Monday to Friday and 9am to 1pm Saturday. No blasting is allowed on Sundays or NSW public holidays.

23. Replace condition E10 with the following:

- E10 The Proponent shall ensure that any blasting carried out during construction of the project does not exceed the criteria in Table 1.

Table 1 - Blasting criteria

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

24. Delete 'and E7' from condition E22(b)(vi).
25. Insert 'and decommissioning' after 'construction' the first time that word appears in condition E22(b)(vi).
26. Replace condition F6 with the following:

Background Noise Survey and Verification Report

F6 Prior to commissioning of the wind farm, the Proponent shall provide an updated determination of background noise levels at representative non-associated residence locations and calculate the appropriate noise criteria according to condition F7. The report should also predict the wind farm noise levels at all non-associated residences or representative clusters of non-associated residences that will experience wind turbine noise greater than 35 dB(A) when turbines are operating at rated power. The report is to be prepared in consultation with the EPA and should meet the requirements set out in Appendix 2.

27. Replace condition F7 with the following:

Operational Noise Criteria – Wind Turbines

F7 The Proponent shall ensure that the noise generated by the operation of wind turbines does not exceed the greater of:

- (a) 35 dB(A); or
- (b) the existing background noise level for each integer wind speed from cut-in speed to the rated power of the wind turbine generators, by more than 5 dB(A).

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

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

28. Replace condition F8 with the following:

Operational Noise Criteria – Ancillary Infrastructure

F8 The Proponent shall ensure that the noise generated by the operation of ancillary infrastructure does not exceed 35 dB(A) $L_{Aeq}(15 \text{ minute})$ at any non-associated residence.

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

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

29. Replace condition F9 with the following:

Operating Conditions

F9 The Proponent shall:

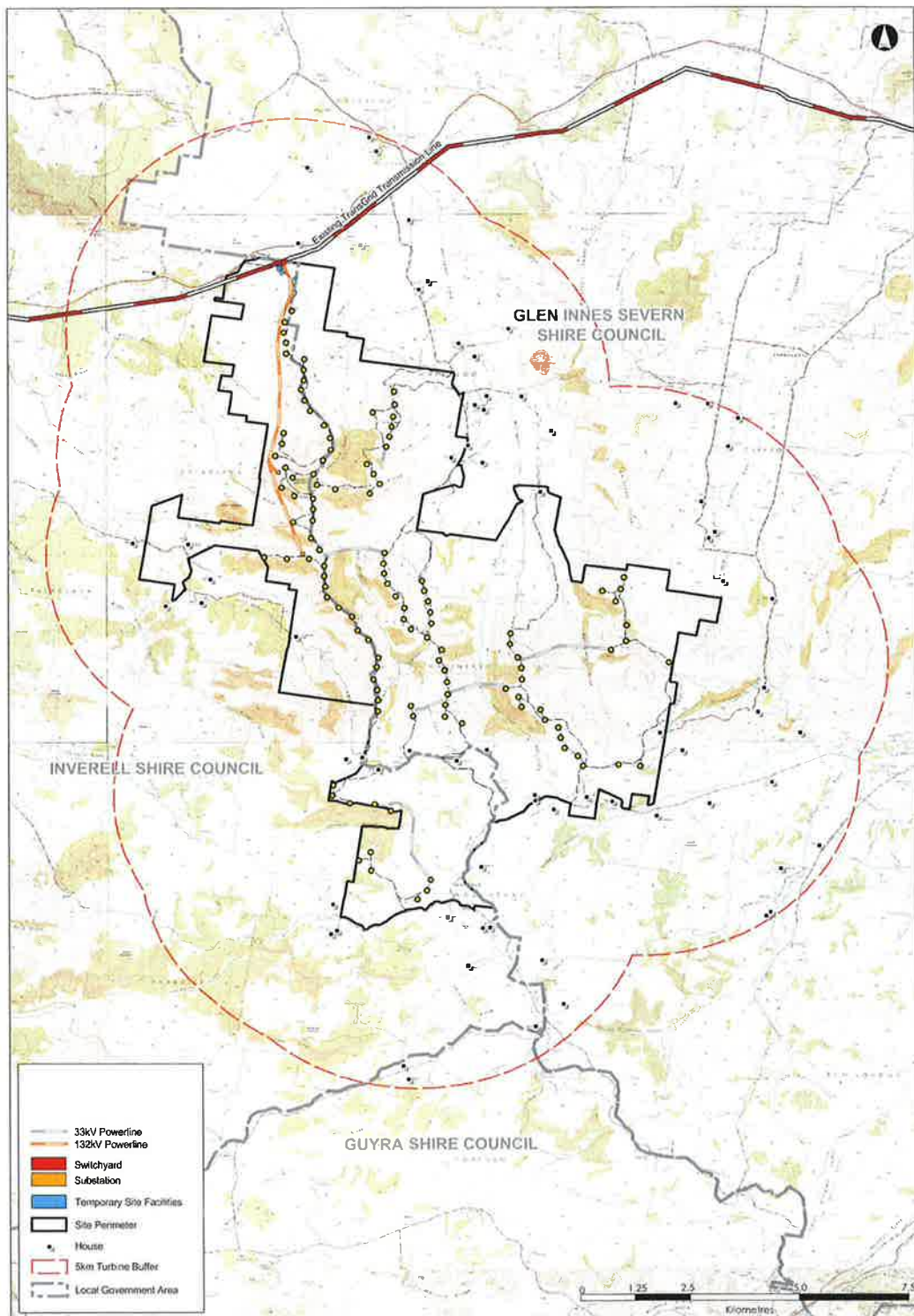
- (a) implement best management practice to minimise the construction, operational, decommissioning and road traffic noise and vibration of the project;
- (b) implement sector management of wind turbines to manage any wind directions or meteorological conditions that are found to result in exceedances of the noise criteria in condition F7;
- (c) undertake noise monitoring within 3 months of the commissioning of the wind farm, or other timing as may be agreed by the Secretary, to determine whether the project is complying with the relevant conditions of this approval; and
- (d) carry out further noise monitoring if required by the Secretary, to the satisfaction of the Secretary.

30. Insert the following after condition F19(f):

- (g) details of how sector management would be used to ensure that operational noise criteria are not exceeded.

31. Insert the following appendices:

APPENDIX 1
PROJECT LAYOUT AND SCHEDULE OF LAND
PROJECT LAYOUT



SCHEDULE OF LAND

| Lot | Deposited Plan |
|-----|----------------|
| 1 | DP1005607 |
| 1 | DP1061812 |
| 2 | |
| 2 | DP1130567 |
| 7 | |
| 2 | DP225300 |
| 4 | |
| 2 | DP228716 |
| 1 | DP600093 |
| 2 | |
| 116 | DP705152 |
| 1 | DP714164 |
| 2 | |
| 157 | DP726527 |
| 78 | DP753260 |
| 90 | |
| 119 | |
| 121 | |
| 122 | |
| 134 | |
| 136 | |
| 144 | |
| 153 | |
| 91 | DP753270 |
| 94 | |

| Lot | Deposited Plan |
|-----|----------------|
| 49 | DP753292 |
| 65 | |
| 75 | |
| 76 | |
| 77 | |
| 101 | |
| 103 | |
| 107 | |
| 111 | DP753319 |
| 30 | |
| 31 | |
| 33 | |
| 124 | DP778366 |
| 9 | |
| 1 | DP840208 |
| 1 | DP865325 |
| 3 | |
| 7 | |
| 1 | DP873080 |
| 2 | |
| 1 | DP883837 |
| 2 | |
| 1 | DP1184223 |
| 1 | DP1187044 |
| 2 | |

APPENDIX 2

BACKGROUND NOISE SURVEY AND VERIFICATION REPORT

Consistent with condition F6 and prior to commissioning of the wind farm, the Proponent must prepare a noise assessment report that includes but is not limited to the following:

- (a) Background noise levels for each of the relevant receiver locations that are not associated with the White Rock Wind Farm. The background noise level data must be collected in accordance with the requirements and recommendations of 'Section 3.1 Background Noise' of the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009).
- (b) Address and GPS location of all non-associated relevant receivers.
- (c) Wind speed measurements for at least each integer wind speed from cut-in speed to the speed up to the rated power of the wind turbine generators in accordance with the requirements of Section 3.2 of the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009).
- (d) Predicted noise levels at all relevant receiver locations that are not associated with the White Rock Wind Farm for each integer wind speed from cut-in speed to the speed of the rated power in accordance with the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009). Noise modelling should be representative of final turbine selection and layout design.
- (e) Where operations need to be controlled under certain meteorological conditions in order to meet noise criteria set out in condition F7, these controls (such as sector management) must be described in detail.
- (f) The noise assessment report should include all the documentation required by Section 5.1 and 5.2 of the document *Wind Farms Environmental Noise Guidelines* (South Australia EPA, 2009).

APPENDIX 3 NOISE COMPLIANCE ASSESSMENT

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

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

Tonality

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

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

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

Low Frequency Noise

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

Notes:

- For the purposes of these conditions, a special noise characteristic is defined as a repeated characteristic if it occurs for more than 10% of an assessment period. This equates to being identified for more than 54 minutes during the 9 hour night from 10pm – 7am, or for more than 90 minutes during the 15 hour day from 7am – 10pm. This definition refers to verified wind farm noise only.
- The maximum penalty to be added to the measured noise level from the wind farm for any special noise characteristic individually or cumulatively is 5 dB(A).
- Notwithstanding conditions F7 and F8 of this project approval, the noise limits specified under these conditions do not apply to any residence where a noise agreement is in place between the Proponent and the owner(s) of those residences in relation to noise impacts and / or noise limits. For this condition to take effect, the noise agreements shall satisfy the relevant requirements of *Guidelines for Community Noise* (WHO, 1999).

PART B: NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions – Wind Turbines

1. The noise criteria in condition F7 of the conditions are to apply under all meteorological conditions.

Applicable Meteorological Conditions – Other Facilities

2. The noise criteria in condition F8 of the conditions are to apply under all meteorological conditions except the following:
 - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
 - (b) temperature inversion conditions between 1.5°C and 3°C/100m and wind speeds greater than 2 m/s at 10 m above ground level; or
 - (c) temperature inversion conditions greater than 3°C/100m.