

The Secretary,
Department of Planning and Environment
Bridge Street Sydney, NSW 2000
Attention: David Kitto (by email: david.kitto@planning.nsw.gov.au)

16 June 2015

Dear David,

**White Rock Wind Farm – MP10_0160
Modification Application seeking administrative changes to Conditions of Project Approval**

This modification application is lodged by White Rock Wind Farm Pty Ltd (**WRWFPL**) as the proponent for the White Rock Wind Farm approved by project approval MP10_0160 granted under Part 3A of the *Environmental Planning and Assessment Act 1979 (NSW)* (**Project Approval**).

WRWFPL is planning for the development of White Rock Wind Farm, with construction currently proposed to commence in late 2015. To achieve this objective, WRWFPL has been undertaking final detailed design and pre-construction investigations, including a review of the conditions of the Project Approval. This review has identified that certain aspects of the biodiversity and operational noise conditions may have unintended consequences and so require modification to ensure a viable project can be implemented.

The proposed modification seeks administrative changes only to the clearing and operational noise conditions of the Project Approval so as to address unintended consequences and ensure that the project remains viable while still delivering the planning objectives outlined in the Director-General's Environmental Assessment Report, July 2012 and complying with the stringent environmental noise objective requirements under the South Australian EPA's "*Wind Farms Environmental Noise Guidelines 2003*" (SA2003).

Attachment B contains details of the administrative modifications sought to the biodiversity and operational noise conditions of Project Approval as follows:

- Condition C1 (Clearing); and
- Conditions F6 to F18 (Operational Noise Criteria).

Should you have any questions in relation to this matter, please do not hesitate to contact me as follows: email jeffbembrick@goldwindaustralia.com or mobile phone: 0499156665.

Yours Sincerely


Jeff Bembrick
Development Compliance Manager.

Attachments:

Attachment A – Modification Application Form, including Reportable Political Donations Disclosure Statement
Attachment B - Details of administrative changes being sought by WRWFPL
Attachment C – Supporting Documents by Sonus re: Noise related conditions of consent

White Rock Wind Farm Pty Ltd

Level 23, 201 Elizabeth Street, Sydney, NSW 2000

ABN 41 167 404 211

Attachment A - White Rock Wind Farm – MP10_0160

Modification Application Form and Reportable Political Donations Disclosure
Statement

Request to modify a major project



NSW GOVERNMENT
Department of Planning

Date duly made: ___/___/___

Modification No. _____

1. Before you lodge

This form is required under section 75W of the *Environmental Planning and Assessment Act 1979* (the Act) in order to request the Minister to modify the Minister's approval to carry out a project or concept plan to which Part 3A of the Act applies.

Before making this request, it is recommended that you first consult with the Department of Planning (the Department) concerning your modification. The Director-General may issue environmental assessment requirements that must be complied with before your request will be considered by the Minister. If the changes proposed by the modification will result in a project that is consistent with the existing approval, the Minister's approval for a modification is not required.

Disclosure Statement

Persons making a request to modify a project or concept plan are required to declare reportable political donations (including donations of or more than \$1,000) made in the previous two years.

Note: For more details about political donations disclosure requirements, including a disclosure form, go to www.planning.nsw.gov.au/donations.

Lodgement

All modification requests must be lodged with the Director-General of the Department of Planning, by courier or mail. An electronic copy should also be e-mailed to the assessment contact officer assigned to the project.

NSW Department of Planning
Ground floor, 23-33 Bridge Street, SYDNEY NSW 2000
GPO Box 39 SYDNEY NSW 2001
Phone 1300 305 695

2. Details of the proponent

Company/organisation/agency		ABN
White Rock Wind Farm Pty Ltd		41 167 404 211
<input checked="" type="checkbox"/> Mr	<input type="checkbox"/> Ms	<input type="checkbox"/> Mrs
<input type="checkbox"/> Dr	<input type="checkbox"/> Other	
First name	Family name	
Ning	Chen	
Position		
Director		
STREET ADDRESS		
Unit/street no.	Street name	
Suite 2	Level 23, 201 Elizabeth Street	
Suburb or town	State	Postcode
SYDNEY	NSW	2000
POSTAL ADDRESS (or mark 'as above')		
'as above'		
Suburb or town	State	Postcode
Daytime telephone	Fax	Mobile
02 9008 1788		
Email		
ningchen@goldwindaustralia.com		

3. Identify the land

STREET ADDRESS (where relevant)

Unit/street no.

Street or property name

(See below)

Suburb, town or locality

Postcode

Local government area(s)

State Electorate(s)

REAL PROPERTY DESCRIPTION

Generally in the area from Grahams Valley Road to the Gwydir Highway, approximately 20km west of Glen Innes in the Glen Innes Severn and Inverell local government areas.
As described in Epuron Environmental Assessment, April 2011.

Note: The real property description is found on a map of the land or on the title documents for the land. If you are unsure of the real property description, you should contact the Department of Lands.

Please ensure that you place a slash (/) to distinguish between the lot, section, DP and strata numbers. If the proposed modification applies to more than one piece of land, please use a comma to distinguish between each real property description.

OR: detailed description of land attached:

MAP: A map of the site and locality should also be submitted with this request.

4. Details of the original major project or concept plan

Briefly describe what the original approval allows

Project Approval MP10_0160 of 10 July 2012, provides for:

- construction and operation of a wind farm with up to 119 turbines and associated infrastructure including access tracks, local road infrastructure upgrades, electrical connections between the turbines (both underground and aboveground power lines), temporary concrete batching plant, on-site control buildings and equipment storage facilities;
- an in-site substation and transmission connection from the substation to the Transgrid 132kV transmission line to the north of the site; and
- permanent monitoring masts

What was the original project application no.?

MP 10_0160

What was the date of the approval?

10 July 2012

What was the original application fee?

\$442,245.00

Note: Clause 245K of the *Environmental Planning and Assessment Regulation 2000* provides information on calculating the maximum fee for a request for modification.

5. Describe the modification you propose to make to the development

Describe the proposed modification

Administrative changes are sought to the Project Approval conditions as described in the accompanying documentation. The modification of the wording is required to ensure a viable project that can be implemented in accordance with the environmental performance objectives for the project as outlined in the Director General's Environmental Assessment Report, July 2012.

Your modification request may need to be accompanied by an Environmental Assessment, including plans.

ESTIMATED CAPITAL INVESTMENT VALUE

Please indicate the estimated capital investment value (CIV) of the modification to the project approval or concept plan (excluding GST).

\$ Nil

FULL TIME EQUIVALENT JOBS

Please indicate the number of jobs created by the proposed modification. This should be expressed as a proportion of full time equivalent (FTE) jobs over a full year.

Construction jobs (FTE) NA Operational jobs (FTE) NA

6. Landowner's consent (where required)

As the owner(s) of the above property, I/we consent to this request being made by the proponent:

Land
Landowners will be notified
Signature
Name
Date

Land
in conjunction with Application
Signature
Name
Date

Note: Under Clause 8F of the *Environmental Planning and Assessment Regulation 2000* (the Regulation), certain applications for approval under Part 3A of the Act do not require consent of the landowner, however, the proponent is required to give notice of the application (e.g. linear infrastructure, mining & petroleum projects, and critical infrastructure).

7. Political donation disclosure statement

Persons making a request to modify a project or concept plan are required to declare reportable political donations (including donations of or more than \$1,000) made in the previous two years.

Have you attached a disclosure statement to this request?

Yes

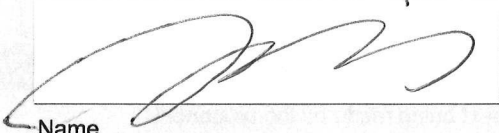
Note: For more details about political donations disclosure requirements, including a disclosure form, go to www.planning.nsw.gov.au/donations.

8. Proponent's signature

As the proponent(s) of the project and in signing below, I/we hereby:

- provide a description of the modification to the project approval or concept plan and address all matters required by the Director-General pursuant to Section 75W of the Act, and
- declare that all information contained within this form is accurate at the time of signing.

Signature



Name

Ning Chen

Date

15 June 2015


In what capacity are you signing if you are not the proponent

Attorney - Under Power of Attorney
dated 29 Aug 2014 Registered
2/9/2014, BK4673 No. 885

Name, if you are not the proponent

Political Donations Disclosure Statement to Minister or the Director-General

If you are required under section 147(3) of the Environmental Planning and Assessment Act 1979 to disclose any political donations (see Page 1 for details), please fill in this form and sign below.

Disclosure statement details				
Name of person making this disclosure White Rock Wind Farm Pty Ltd	Planning application reference (e.g. DA number, planning application title or reference, property address or other description) MP10-0160			
Your interest in the planning application (circle relevant option below)				
You are the APPLICANT <input checked="" type="radio"/> YES / NO	You are a PERSON MAKING A SUBMISSION IN RELATION TO AN APPLICATION YES / NO			
Reportable political donations made by person making this declaration or by other relevant persons				
* State below any reportable political donations you have made over the 'relevant period' (see glossary on page 2). If the donation was made by an entity (and not by you as an individual) include the Australian Business Number (ABN).				
* If you are the applicant of a relevant planning application state below any reportable political donations that you know, or ought reasonably to know, were made by any persons with a financial interest in the planning application, OR				
* If you are a person making a submission in relation to an application, state below any reportable political donations that you know, or ought reasonably to know, were made by an associate.				
Name of donor (or ABN if an entity)	Donor's residential address or entity's registered address or other official office of the donor	Name of party or person for whose benefit the donation was made	Date donation made	Amount/ value of donation
	NIL			
<i>Please list all reportable political donations—additional space is provided overleaf if required.</i>				
By signing below, I/we hereby declare that all information contained within this statement is accurate at the time of signing.				
Signature(s) and Date				
				
Name(s)				
Ning Chen as Attorney under Power of Attorney dated 29 August 2014 (Res'd 2/9/14 BK 4673 No. 885)				

Attachment B - White Rock Wind Farm – MP10_0160 Modification Application Explanation of Administrative changes being sought

1. Background

The White Rock Wind Farm is a critical infrastructure project under Part 3A of the *Environmental Planning and Assessment Act 1979 (NSW)* (**EP&A Act**).

The White Rock Wind Farm was subject to a detailed environmental assessment including the Environmental Assessment Report dated April 2011 (**Environmental Assessment**), the subsequent Submissions Report dated November 2011 (**Submissions Report**) and the Statement of Commitments (**SOC**) (collectively, the **Assessment Documentation**).

The White Rock Wind Farm was then assessed by the Department of Planning and Environment and a Director-General's Environmental Assessment Report dated July 2012 (**DG's Assessment Report**) was prepared. The DG's Assessment Report considered relevant matters including the Assessment Documentation, submissions from the community and relevant governmental agencies. The DG's Assessment Report recommended that approval be granted to the White Rock Wind Farm subject to proposed draft conditions.

Project approval MP10_0160 (**Project Approval**) was subsequently granted, subject to conditions, for the White Rock Wind Farm under Part 3A of the EP&A Act on 10 July 2012. The Project Approval was issued to White Rock Wind Farm Pty Ltd (**WRWFPL**) as proponent for the White Rock Wind Farm.

WRWFPL is planning for the development of White Rock Wind Farm, with construction currently proposed to commence in late 2015. To achieve this objective, WRWFPL has been undertaking final detailed design and pre-construction investigations. During these activities, WRWFPL has identified aspects of the wording of the Project Approval that appears to introduce unintended constraints on the project and where WRWFPL seeks review of specific conditions to achieve a workable Project Approval that retains appropriate environmental protection requirements.

2. Overview of the Proposed Administrative Modifications to the Conditions of the Project Approval

The proposed modification seeks administrative changes only to the clearing and operational noise conditions of Project Approval so as to address unintended consequences and ensure that the project remains viable while still delivering the stringent environmental performance objectives referred to in the DG's Assessment Report, July 2012.

This modification application seeks administrative changes to:

- Condition C1 (Clearing); and
- Conditions F6 to F18 (Operational Noise Criteria).

Details of the changes sought to these conditions are set out below.

3. Condition C1 (Clearing)

As currently expressed, condition C1 of the Project Approval limits the clearing of all native vegetation to 'no more than 22 hectares'. However, the 22 hectares of native vegetation referenced in the Environmental Assessment documents only relates to "**native vegetation classified as endangered [ecological community]**".

The Environmental Assessment included an assessment of the flora impacts of the project, including an ecological assessment prepared by RPS. This ecological assessment stated that (the key provisions shown in bold for emphasis):

'Whilst careful siting of the turbines and associated infrastructure in cleared areas and along existing access tracks has minimised the removal of native vegetation there will be some removal of native vegetation as a result of the proposal. Within the 1,361 ha study area there is approximately 330 ha of native vegetation. **Of this, the Ribbon Gum EEC occupies approximately 327 ha and the Yellow Box EEC occupies 3.4 ha.** The remaining 1031 ha is occupied by cleared pasture with scattered trees.

The proposal will modify the vegetation in two different ways. Direct and complete clearing will need to occur for the access roads, turbine footprints, cabling and other related infrastructure. This is estimated to result in the **removal of 4.9 ha of the Ribbon Gum EEC.**

For transmission lines it is unlikely that complete clearing will be necessary, although significant modification will still be required. The easement for the 132 kV power line connecting the wind farm to the TransGrid line will be 40m wide and for the 33 kV overhead lines on the wind farm between the ridges will be up to 25m wide. Vegetation clearance is not required for the full easement width and will depend on the final line design. Vegetation clearance required from the conductors will vary from 2m at the poles to between 4m and 6m at mid-span. The design of the power lines can also be varied to reduce the impact on any specific areas of vegetation. Considering a worst-case scenario of complete clearing and/or vegetation modification, it is estimated that none of the Yellow Box EEC and **17.6 ha of the Ribbon Gum EEC could be affected.**

In total, this equates to a potential maximum impact of **22 ha** (4.9 permanent vegetation loss for turbines and tracks + 17.6 modified vegetation for powerlines) of **native vegetation classified as endangered.**

Accordingly, the Environmental Assessment concluded that the maximum impact of the White Rock Wind Farm on native vegetation classified as an endangered ecological community would be 22 ha. In addition to the endangered ecological communities assessed, the Environmental Assessment also identified other scattered native vegetation, not classified as an endangered ecological community, some of which will need to be cleared to enable construction of the project.

It appears from the DG's Assessment Report that this distinction may have been overlooked in formulating the conditions for the Project Approval. In particular, the DG's Assessment Report states that:

'Site vegetation is mainly cleared, although remnant patches of tall open forests occur. The predominant vegetation communities are Ribbon Gum, Mountain Gum, Snow Gum and

Grassy Forest/Woodland of the New England Tableland Bioregion (known as Ribbon Gum-Mountain Gum Woodland) endangered ecological community (EEC), Yellow Box Woodland EEC and cleared pasture with scattered trees. Both EEC's are listed under the Threatened Species Conservation Act 1995 (TSC Act). The construction of the wind farm will involve the removal or modification of 7% of the native vegetation (**22 hectares**) on site.'

WRWF seeks an administrative modification to condition C1 to correct this unintended consequence so as that it reads as follows:

The clearing of all native vegetation is to be limited to the minimal extent **practicably required** <insert: **reasonable and feasible**> as detailed in the Construction Flora & Fauna Management Plan and no more than 22 hectares <insert: **of an endangered ecological community**> is to be cleared, unless otherwise agreed by the <replace: Secretary> **Director General**. Details regarding the procedures for clearing <insert: **native**> vegetation and minimising the extent of clearing <insert: **of native vegetation**> shall be clearly included in the Construction Flora and Fauna Management Plan contained in condition E22.

4. Conditions F6 to F18 (Operational Noise Criteria)

The South Australian EPA's "Wind Farms Environmental Noise Guidelines 2003" (SA2003) requires that:

The predicted equivalent noise level ($L_{Aeq,10}$), adjusted for tonality in accordance with these Guidelines, should not exceed:

- a) 35 dB(A), or*
- b) the background noise ($L_{A90,10}$) by more than 5 dB(A)*

whichever is greater, at all relevant receivers for each integer wind speed from cut-in to rated power of the WTG.

SA2003 is considered to provide objective criteria and assessment methodologies which are amongst the most stringent and contemporary in the World (Clean Energy Council Technical Paper S3387C6 November 2010).

As such, the noise limits established by SA2003 provide a high level of amenity protection for all non-associated receivers.

The noise limits established by SA2003 are reflected in condition F7 of the Project Approval which imposes a general noise limit for the project of:

(a) 35 dB(A); or

(b) the existing background noise level ($LA90$ (10-minute)) correlated to the integer wind speed at hub height at the wind farm site by more than 5 dB(A),

whichever is the greater, for each integer wind speed (measured at hub height) from cut-in to rated power of the wind turbine generator.

WRWFPL is confident that the final selected turbine and layout will be able to comply with the stringent noise limits required by SA2003 and contained in condition F7 for all non-associated receivers.

However, in addition to the condition F7 noise limits, the current Project Approval conditions impose additional noise limits in conditions F6 and F8. These additional noise limits are not consistent with the intent of SA2003, are impractical to implement and may, if imposed, unduly constrain the project layout or turbine selection, reducing the total renewable energy generated over the life of the Project by requiring a suboptimal turbine layout. Accordingly, WRWF seeks that:

- Condition F7 be clarified to reflect that, consistent with SA2003, these noise limits will not apply to any receivers associated with the wind farm;
- Condition F6 be deleted and condition F8 be modified to remove the additional noise limits; and
- consequential amendments are made to conditions F9 to F13.

In addition, the wording of the tonality provisions contained in condition F10 no longer represent current practice and should be updated to reflect current standards.

A letter dated 15 June 2015 prepared by Sonus is attached which outlines in detail the administrative modifications required to conditions F6 to F18 and the reason why these are required.

The following table summarises the administrative modifications sought to these conditions:

Condition	Proposed Modification
Condition F6	<p>This condition imposes noise limits for the project which are inconsistent with SA2003.</p> <p>Further, this condition refers to R44 and R45, the owners of which have now entered into a noise agreement with WRWF.</p> <p>Accordingly, WRWF seeks the deletion of condition F6.</p>
Condition F8	<p>WRWFPL is committed to preparing a revised noise assessment for the project to confirm that the final turbine model and layout will comply with the noise limits for the project. However, like condition F6, as currently drafted, this condition imposes noise limits for the project which are inconsistent with SA2003 . Accordingly, WRWF requests that this condition be modified to delete the following words from this condition ‘Where noise predictions are found to be below the limit specified in condition F6 and F7, then those revised predictions will become the new limit.’</p>
Condition F10	<p>This condition provides for a 5dB(A) increase to the measured noise where tonality is present. However, the current tonality provisions contained in condition F10 no longer represent current practice and should be updated to reflect current standards.</p>

Condition F11 This condition has addressed exceptions to noise criteria set out in Condition F7 but F11 does not currently include associated residences. WRWFPL believes it was intended to apply for associated residences as per wording of F7 and should accordingly be amended.

Condition F12 This condition relates to noise from the substation but includes reference to wind speeds. The noise from the substation is not affected by wind speeds and so the wind speed provisions should be removed.

Conditions F8 to F18 For consistency, WRWFPL requests minor changes, as necessary, to these conditions:

- to refer to the noise limits in condition F7 only; and
- to reflect that the noise limits in condition F7 will not apply to any receivers who are associated with the White Rock Wind Farm.

The proposed rewording of noise conditions is provided in the attachment to the Sonus Letter provided in Attachment C.

5. Conclusion

The proposed modification seeks administrative changes only to the clearing and operational noise conditions of Project Approval so as to address unintended consequences and ensure that the project remains viable while still delivering contemporary and stringent environmental performance objectives.

White Rock Wind Farm Pty Ltd

Level 23, 201 Elizabeth Street, Sydney, NSW 2000

ABN 41 167 404 211

Attachment C - White Rock Wind Farm – MP10_0160

Modification Application

Supporting Documents from Sonus related to noise conditions



Goldwind Australia Pty Ltd
Level 23, 201 Elizabeth Street
SYDNEY NSW 2000

S4646C7

Attention: Tom Nielsen

15 June 2015

Dear Tom,

WHITE ROCK WIND FARM NOISE RELATED CONDITIONS OF CONSENT

The White Rock Wind Farm (WRWF) was assessed in accordance with the South Australian EPA's "Wind Farms Environmental Noise Guidelines 2003" (SA2003) as per the Director-General's Requirements (DGRs) of 13 October 2010 (Sonus report S3486C2 December 2010). SA2003 requires that:

The predicted equivalent noise level ($L_{Aeq,10}$), adjusted for tonality in accordance with these Guidelines, should not exceed:

- 35 dB(A), or
- the background noise ($L_{A90,10}$) by more than 5 dB(A)

whichever is greater, at all relevant receivers for each integer wind speed from cut-in to rated power of the WTG.

The WRWF received Project Approval in July 2012. At that time, consistent noise related conditions for wind farms had not been developed in NSW. Since that time, with the introduction of Environment Protection Licences for Wind Farms, conditions have been developed which more consistently and accurately represent the requirements of SA2003 and the DGRs.

Consideration has been given to the noise related conditions of consent for the WRWF and modifications have been developed which more consistently and accurately represent the requirements of SA2003 and the DGRs.

The modifications are summarised as an annexure to this document. The rationale for the modifications is provided below.

**WHITE ROCK WIND FARM
NOISE RELATED CONDITIONS OF CONSENT**

15 June 2015

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Condition F6 states:

- F6. *Subject to conditions F8 to F11 of the approval, the project shall be designed, operated and maintained to ensure that the equivalent noise level ($L_{Aeq (10-minute)}$) from the project does not exceed the noise criteria and predicted wind farm noise identified in Appendix F of the White Rock Wind Farm Environmental Noise Assessment (Sonus, December 2010) at each of the corresponding residential receiver locations except for residences R44 & R45. The noise levels at Residences R44 & R55 shall not exceed the criteria within the draft NSW Planning Guidelines – Wind Farms (December 2011), as updated, and Wind Farms: Environmental Noise Guidelines (South Australian Environmental Protection Agency, 2003) unless a noise agreement is entered into.*

This condition:

- is impractical to implement - where a noise criterion does not include a reference to the existing background noise level as a lower limit, there is the potential for the noise criterion to be below the existing background noise level, particularly at high wind speeds. In these circumstances, it would be impossible to measure the noise at a non-associated receiver location to determine compliance; and
- extends the operational criteria well beyond the requirements of SA2003.

In these circumstances, it is considered appropriate that the condition be removed to accurately represent the requirements of SA2003 and the DGRs and to ensure that compliance with these requirements can be practicably verified through contemporary testing methods (in accordance with the Noise Compliance Plan to be developed to the satisfaction of the Director-General under Condition F14).

**WHITE ROCK WIND FARM
NOISE RELATED CONDITIONS OF CONSENT**

15 June 2015

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Condition F10 states:

F 10 For the purposes of conditions F6 - F8 of this approval, 5 dB(A) shall be added to measured noise levels where tonality is present, as defined in Appendix 8: NSW wind farm noise guidelines, of the draft NSW Planning Guidelines- Wind Farms (December 2011), as updated. The presence of tonality shall be determined using the methodology detailed in Wind Turbine Generator Systems- Part 11: Acoustic Noise Measurement Techniques IEG 61400-11:2002 or its latest edition.

The status of the draft NSW Planning Guidelines is unknown; however the tonality measurement methodology in the draft Guidelines is different to the methodology in IEC 61400-11:2002. Therefore, Condition F10 introduces two methodologies which will have different results. In addition, IEC 61400 provides a measurement methodology to assess tonality at the turbine rather than at the non-associated receiver. As it is the tonality at the receiver which is important in the assessment of potential impact, an alternate methodology should be considered.

With the introduction of Environment Protection Licences in NSW, it has become common practice for the tonality test of the Industrial Noise Policy to be applied to the assessment of tonality for wind farms. In these circumstances, it is considered appropriate that the condition be modified as follows:

"For the purposes of Condition F7, 5 dB(A) shall be added to the measured level in accordance with the methodology detailed in the Noise Compliance Plan required under Condition F14 if tonality is found to be a repeated characteristic of the wind farm at a non-associated receiver. The presence of tonality must be determined using a methodology based on the modifying factor for tonality presented in Section 4 of the NSW Industrial Noise Policy (EPA, 2001)".

Conditions F8, F9, F11, F12, F13, F14, F15, F17 and F18

These conditions are modified to ensure consistency with the removal of F6 and modification of F10 and to reflect that the noise limits in condition F7 will not apply to any receivers who are associated with the White Rock Wind Farm. The modifications are minor in nature and for the purposes of consistency and clarification only.

**WHITE ROCK WIND FARM
NOISE RELATED CONDITIONS OF CONSENT**

15 June 2015

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Summary

Based on the above, the following recommendations are made to more consistently and accurately represent the requirements of SA2003, the DGRs and the potential Environment Protection Licence conditions:

- Remove Condition F6;
- Modify Condition F10;
- Modify Conditions which reference F6 to maintain consistency with the above changes and to clarify the scope of application of the noise limits to non-associated receivers only.

If you have any questions or require clarification, please call me.

Yours faithfully
Sonus Pty Ltd

A handwritten signature in black ink, appearing to read "Jason Turner", is written over several horizontal lines.

Jason Turner
Senior Associate

DEFINITIONS

Non-associated Landowner that has not reached a financial or in-kind agreement with the Proponent in relation to the project.

Sensitive Receiver Any ~~Non~~ associated residential dwelling or ~~Non~~ associated education institution (e.g. school, university, TAFE college), health care facility (e.g. nursing home, hospital), religious facility (e.g. church) and children's day care facility.

Deleted: **Receptor**

Deleted: non

Deleted: non

Deleted: receptor

SCHEDULE B ADMINISTRATIVE CONDITIONS

NOISE

Operational Noise Criteria - Wind Turbines

F7. The project shall be designed, operated and maintained to ensure that the equivalent noise level (LAeq (10-minute)) from the project does not exceed at any residential receiver (excluding those associated with the wind farm) in existence or the subject of a valid development consent at the date of this approval:

- 35 dB(A); or
- the existing background noise level (LA90 (10-minute)) correlated to the integer wind speed at hub height at the wind farm site by more than 5 dB(A),

whichever is the greater, for each integer wind speed (measured at hub height) from cut-in to rated power of the wind turbine generator.

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Deleted: F6. . . Subject to conditions F8 to F11 of the approval, the project shall be designed, operated and maintained to ensure that the equivalent noise level (LAeq (10-minute)) from the project does not exceed the noise criteria and predicted wind farm noise identified in Appendix F of the White Rock Wind Farm Environmental Noise Assessment (Sonus, December 2010) at each of the corresponding residential receiver locations except for residences R44 & R45. The noise levels at Residences R44 & R55 shall not exceed the criteria within the draft *NSW Planning Guidelines – Wind Farms* (December 2011), as updated, and *Wind Farms: Environmental Noise Guidelines* (South Australian Environmental Protection Agency, 2003) unless a noise agreement is entered into.

F8. The Proponent shall prepare a revised Noise Assessment for the final turbine model and turbine layout selected, which shall be submitted to the Director-General prior to commissioning of the wind turbines. The revised Noise Assessment shall include the noise predictions of the final turbine model and layout selected at each of the receiver locations. The assessment shall demonstrate consistency with the EA and the ability of the final turbine model and layout to meet the requirements of condition ~~F7~~. The assessment shall include a discussion of the difference of the spectral noise signature between the final turbine model and the original turbine model used within the EA noise assessment.

Deleted: F6 and

Deleted: Where noise predictions are found to be below the limit specified in condition F6 and F7, then those revised predictions will become the new limit.

F9. Noise from the project is (where access is agreed by the owner and occupier of the relevant dwelling) 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 in conditions ~~F7~~.

Deleted: F6

Deleted: - F8

F10 For the purposes of Condition F7, 5 dB(A) shall be added to the measured level in accordance with the methodology detailed in the Noise Compliance Plan required under Condition F14 if tonality is found to be a repeated characteristic of the wind farm at a non-associated receiver. The presence

Deleted: F10. For the purposes of conditions F6 - F8 of this approval, 5 dB(A) shall be added to measured noise levels where tonality is present, as defined in *Appendix B: NSW wind farm noise guidelines*, of the draft *NSW Planning Guidelines - Wind Farms* (December 2011), as updated. The presence of tonality shall be determined using the methodology detailed in *Wind Turbine Generator Systems - Part 11: Acoustic Noise Measurement Techniques IEG 61400-11:2002* or its latest edition.

[of tonality must be determined using a methodology based on the modifying factor for tonality presented in Section 4 of the NSW Industrial Noise Policy \(EPA, 2001\).](#)

F11. Notwithstanding condition [F7](#) of this approval, the noise limits specified under those conditions do not apply to any [associated residence or any other](#) 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) and *Appendix 8: NSW wind farm noise guidelines*, of the draft *NSW Planning Guidelines- Wind Farms* (December 2011), as updated.

Operational Noise Criteria -Other Facilities

F12. The substation shall designed, constructed, operated and maintained to ensure that the noise contributions from those components to the background acoustic environment do not exceed the maximum allowable noise contributions specified in Table 3, at the nearest [Non-associated](#) existing sensitive receptor to the substation.

Table 3 – Substation Noise Criteria

Day 7:00am to 6:00pm Mondays to Saturdays 8:00am to 6:00pm Sundays and public holidays	Evening 6:00pm to 10:00pm on any day	Night 10:00pm to 7:00am Mondays to Saturdays 10:00pm to 8:00am Sundays and public holidays	
LAeq(15 minute)	LAeq(15 minute)	LAeq(15 minute)	LA1 (1 minute)
35	35	35	45

For the purpose of assessment of noise contributions specified under this condition, noise from these components shall be:

- (a) [\(where access is agreed by the owner and occupier of the relevant dwelling\)](#) 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 LAeq(15 minute) noise limits;
- (b) [\(where access is agreed by the owner and occupier of the relevant dwelling\)](#) measured at 1 metre from the dwelling facade to determine compliance with the LA1 (1 minute) noise limits; and
- (c) subject to the modification factors provided in Section 4 of the *New South Wales Industrial Noise Policy* (EPA, 2000), where applicable.

Notwithstanding the above, should direct measurement of noise from these components be impractical, the Proponent may employ an alternative noise assessment method deemed acceptable by the OEH (refer to Section 11 of the *New South Wales Industrial Noise Policy* (EPA, 2000)). Details of such an alternative noise assessment method accepted by the OEH shall be submitted to the Director-General prior to the implementation of the assessment method.

F13. The requirements of condition F12 do not apply [to any associated residence or any other sensitive receiver](#) if a negotiated agreement consistent with the requirements of Section 8.3 of the *New South Wales Industrial Noise Policy* (EPA, 2000), exists between the Proponent and the relevant sensitive receptor.

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Deleted: The maximum allowable noise contributions apply under wind speeds up to 3 ms-1 (measured at 10 metres above ground level), or under temperature inversion conditions of up to 3 °C/¶ 100 metres and wind speeds of up to 2m/s at 10 metres above the ground.

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Verification of Operational Noise

- F14. The Proponent shall prepare a Noise Compliance Plan which shall be submitted to the Director-General prior to commissioning of the wind turbines. The Noise Compliance Plan shall include, but not be limited to:
- (a) an assessment to be undertaken of the performance of the project against the noise predictions/criteria contained in condition ~~F7~~;
 - (b) a commitment that noise compliance monitoring will be undertaken within three calendar months of the commissioning of the wind turbines. If prevailing meteorological conditions do not allow the required monitoring to be undertaken in this period, the Director-General shall be notified and an extension of time may be sought; and
 - (c) a requirement that all noise compliance monitoring results are submitted to the Director-General within one month of completion of the monitoring. The Director-General may request that additional noise compliance monitoring be undertaken and completed within a specified timeframe.

The Noise Compliance Plan shall be undertaken generally in accordance with the procedures presented in *Appendix 8: NSW wind farm noise guidelines*, of the draft *NSW Planning Guidelines – Wind Farms* (December 2011), as updated, and shall report against both the NSW Guidelines and the *South Australian Environment Protection Authority Wind Farm Guidelines 2003*.

- F15. In the event that the Noise Compliance Plan (noise compliance monitoring) indicates that noise from the wind turbines exceeds the noise limits specified under conditions ~~F7~~, as relevant, the Proponent shall investigate and propose reasonable and feasible mitigation and management measures to achieve compliance with the noise limits. Details of the remedial measures and a timetable for implementation shall be submitted to the Director-General for approval within such period as the Director-General may require. Remedial measures shall include, in the first instance, all reasonable and feasible measures to reduce noise from the project, including but not necessarily limited to reduced operation of wind turbines. Once all reasonable and feasible source controls are exhausted, remedial measures may include building acoustic treatments and/or noise screening for affected residents, but may only be used to address noise limit exceedances at the absolute discretion of the relevant landowner/resident. The Proponent shall also demonstrate that the relevant landowner/resident has been made fully aware of the noise and other implications of making any agreement.
- F16. The Proponent shall provide written notice to all landowners who are entitled to rights under condition F15 within 21 days of determining the landholdings to which these rights apply. For the purpose of condition F15, this condition only applies where operational noise levels have been confirmed in accordance with condition F14.
- F17. The Proponent shall bear the costs of any additional at-receiver mitigation measures implemented at an affected property in accordance with condition F15.
- F18. Any landowner or resident whose residence is within 3 km of a turbine may ask the Director-General in writing for an independent review of the impacts of the project on his/her land. If the Director-General is satisfied that an independent review is warranted, then the Director-General may require the Proponent to commission a suitably qualified independent expert, whose appointment has been agreed to by the Director-General, to consult with the landowner/resident to determine his/her concerns, and conduct monitoring consistent with *Appendix B: NSW wind farm noise guidelines* of the draft *NSW Planning Guidelines- Wind Farms* (December 2011), as updated, to determine whether the project complies with the criteria identified in condition ~~F7~~. The results of the monitoring shall be reported to the Director-General and the specified limits under condition ~~F7~~, the provisions of conditions F15 - F17 apply

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