

Stockyard Hill Wind Farm Pty Ltd  
Level 12  
321 Exhibition Street  
MELBOURNE VIC 3000

**S3425C57**

**Attention: Peter Marriott**

**30 August 2016**

Dear Peter,

## **STOCKYARD HILL WIND FARM ENVIRONMENTAL NOISE ASSOCIATED WITH AMENDED APPLICATION**

Stockyard Hill Wind Farm Pty Ltd (SHWFPL) (a subsidiary of Origin Energy) is developing a wind farm project in south-west Victoria, known as the Stockyard Hill Wind Farm (SHWF). Planning Permit No. PL-SP/05/0548 (Pyrenees Planning Scheme) (the Permit) was issued by the Minister for Planning in October 2010 to enable the use and development of the SHWF Wind Energy Facility (WEF).

Subsequently, SHWFPL prepared an application to amend the Permit. As part of the application, Sonus prepared an environmental noise assessment (the Sonus Assessment) of the application to amend the Permit (S3425C56). The Sonus Assessment considered the noise from an indicative layout and turbine models based on the understanding that the final turbine model and resulting layout will be determined by a competitive tender. Condition 23 of the Permit requires that noise modelling be conducted prior to construction to ensure that the final turbine selection and layout achieves the relevant environmental noise criteria. A similar condition is proposed as part of the amendment.

Since the Sonus Assessment, SHWFPL are now seeking to further amend Planning Permit No. PL-SP/05/0548 to allow a turbine with a rotor diameter of 142m, compared with the largest indicative rotor diameter assessed in the Sonus Assessment of 140m.

From an acoustic perspective, the increase in rotor diameter from 140m to 142m is not significant. A turbine with a 142m diameter will not necessarily emit more (or less) noise than a turbine with a 140m diameter. This is demonstrated by comparison of the indicative turbine models in Appendix G of the Sonus Assessment. This comparison shows that the turbine with the largest diameter (140m) produces the lowest overall sound power level of the three indicative models. That is, it is the final turbine selection which is critical in determining the noise at residences and the noise from the final turbine selection and layout will be required to be assessed before construction.

Based on the above, it is considered that the increase in potential rotor diameter from 140m to 142m does not require a change to the methodology of the Sonus Assessment and the conclusions and recommendations remain valid.

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 'C. Turnbull', written in a cursive style.

Chris Turnbull  
**Principal**

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