

RECOMMENDED CHANGES TO DRAFT STANDARD

To: Craig Watkin Standards New Zealand Private Bag 2439 WELLINGTON Fax: +64 4 498 5994 Email: craig.watkin@standards.co.nz	From: Sally Baguley Genesis Power Limited PO Box 17-188 Greenlane Auckland	
	Closing date for comment 30 April 2009	Date of your comments 30 April 2009
DR DZ6808 Committee: P6808		
Title: Acoustics - Wind farm noise		

Comment is preferred in electronic format using Microsoft Word 97 or above, following the layout below. Electronic drafts are available from Standards New Zealand web site at <http://www.standards.co.nz>.

The following form is for comments to be submitted electronically. Please email your comments to craig.watkin@standards.co.nz

GENERAL COMMENT

Type your general comments in the box. The comment box will automatically expand to accommodate comments of any length.

Section 5.3 of the draft standard provides for a "secondary noise limit" where it "*may be desirable to afford a greater degree of protection during evening and night-time*". The section proposes that such a secondary limit should only be considered where:

- a) *Background sound levels during evening or night-time are commonly less than 25 dB and the wind farm sound levels are predicted to exceed the background sound level by 10 dB or more; or*
- b) *Objectives or policies in a district plan promote a higher degree of protection of amenity; or*
- c) *District plan rules require a higher degree of protection of amenity related to the sound environment of a particular locality.*

Genesis Energy considers that section 5.3.1(a) of the draft standard imposes a more stringent noise standard in relation to wind turbines than is applied to any other activity controlled through the use of the other NZ noise standards such as NZS6801 and NZS6802. This has the effect of "penalising" wind farm developments in terms of the allowable noise levels over other types of

activity that could take place in a similar area. Not all localities which meet the criteria in section 5.3.1(a) would necessarily require the higher noise limit and whether or not a higher level of protection is required is a matter for each District Council to consider in relation to the areas under its jurisdiction.

Genesis Energy considers that the proposed section 5.3 on secondary noise limits has no place in the proposed standard and should be deleted in its entirety. However, further guidance for Councils as to when it might be appropriate to apply more stringent noise levels should be provided through amendments to C5.1.3 as follows:

In situations where the District Plan determines that a higher standard of amenity relating to the sound environment of a particular location is required, then the wind farm sound levels ($L_{A90(10\ min)}$) should not exceed the background sound level by more than 5 dB, or a level of 35 dB $L_{A90(10\ min)}$, whichever is the greater. The noise limit applies at every point within the notional boundary of an existing noise sensitive location defined in the District Plan rules. This limit only applies when the wind speed at the hub-height of the nearest wind turbine is less than 6 m/s, during evening and night-time. During daytime and for higher wind speeds the noise limit in 5.2 should always apply. Wind farm noise limits should not be set lower than 35 dB L_{90} at any time.

Other references in the proposed standard to the "Primary Noise Limit" should be amended to refer to the "Noise Limit" and references to the "Secondary Noise Limit" should be deleted accordingly.

SPECIFIC COMMENT

Insert the number of the clause, paragraph or figure. Do not preface the number with words (i.e. 1 not clause 1). If there is no clause number, use the section heading (e.g. Preface). Insert the page, paragraph and line number as appropriate. Use a new row for each comment.

The rows will automatically expand to accommodate comments of any length. Remove unused rows, or insert additional rows as required. To insert extra rows at the end of the table, go to the last cell and press the TAB key.

Clause/ Para/ Figure/ Table No	Page No	<p align="center">Recommended Changes and Reason Exact wording of recommended changes should be given</p>
Table of Contents	10	Delete reference to "Primary" noise limit; delete "Secondary noise limit" section.
Foreword	14	Delete sentence " <i>The original recommended noise limits are retained, but are added to by provision for a more stringent secondary noise limit where justified by particular local circumstances.</i> "
4.2	26	Delete phrase ", or within the 35 dB wind farm sound level contour if a secondary noise limit has been applied".
5.2	27	Amend section heading to "Noise Limit"
c5.1.3	27	<p>Amend c5.1.3 to read</p> <p align="center"><i>"In situations where the District Plan determines that a higher standard of amenity relating to the sound environment of a particular location is required, then the wind farm sound levels ($L_{A90(10\ min)}$) should not exceed the background sound level by more than 5 dB, or a level of 35 dB $L_{A90(10\ min)}$, whichever is the greater. The noise limit applies at every point within the notional boundary of an existing noise sensitive location defined in the District Plan rules. This limit only applies when the wind speed at the hub-height of the nearest wind turbine is less than 6 m/s, during evening and night-time. During daytime and for higher wind speeds the noise limit in 5.2 should always apply. Wind farm noise limits should not be set lower than 35 dB L_{90} at any time."</i></p>

Clause/ Para/ Figure/ Table No	Page No	<p style="text-align: center;">Recommended Changes and Reason <i>Exact wording of recommended changes should be given</i></p>
5.3	28	Delete section 5.3.
5.4 to 5.7	30 to 31	Renumber sections from 5.4 to 5.7 as 5.3 to 5.6 accordingly.