

## APPENDIX 9-6. TURBINE SOUND POWER LEVELS

This Appendix presents the sound power levels of the various turbine technologies used in the assessment.

**Appendix Table 9-6-1. Lissinagroagh: Assessment Turbine<sup>a</sup> at a hub height of 103.5 m**

Standardised 10m Height Wind Speed (m/s)	Octave Band (Hz) Sound Power Levels (dB re 10 <sup>-12</sup> W)								
	63	125	250	500	1k	2k	4k	8k	dB(A)
3 (V162)	87.6	90.7	88.9	87.0	87.1	85.5	77.7	64.9	96.0
4 (GE-158)	81.3	88.3	93.4	94.8	94.4	91.7	85.9	71.6	100.3
5 (GE-158)	85.1	91.5	96.6	98.7	99.2	96.4	89.6	75.1	104.4
6 (N163)	88.0	94.6	98.3	100.4	101.7	99.8	90.2	82.3	106.7
7 (N163)	88.6	95.1	98.8	100.9	102.2	100.4	90.8	82.9	107.2
8 (N163)	88.9	95.1	98.8	101.4	102.1	99.6	92.0	84.0	107.2
≥9 (N163)	88.9	95.1	98.8	101.4	102.1	99.6	92.0	84.0	107.2

a. See Section 9.4.3.2

**Appendix Table 9-6-2. Faughry: Enercon E82 2 MW at a hub height of 105 m**

Standardised 10m Height Wind Speed (m/s)	Octave Band (Hz) Sound Power Levels (dB re 10 <sup>-12</sup> W)								
	63	125	250	500	1k	2k	4k	8k	dB(A)
3	79.7	87.7	87.4	90.0	91.8	86.9	74.9	66.5	96.3
4	79.7	87.7	87.4	90.0	91.8	86.9	74.9	66.5	96.3
5	79.7	87.7	87.4	90.0	91.8	86.9	74.9	66.5	96.3
6	84.1	92.1	91.8	94.4	96.2	91.3	79.0	70.9	100.7
7	86.7	94.7	94.4	97.0	98.0	93.9	81.6	73.5	103.3
8	87.4	95.4	95.1	97.7	99.5	94.6	82.3	74.2	104.0
≥9	87.4	95.4	95.1	97.7	99.5	94.6	82.3	74.2	104.0