

Appendix 11.3

Candidate Turbine Manufacturer's Noise Emission Data

Frequency	Hub height wind speeds [m/s]																	
	3 m/s	4 m/s	5 m/s	6 m/s	7 m/s	8 m/s	9 m/s	10 m/s	11 m/s	12 m/s	13 m/s	14 m/s	15 m/s	16 m/s	17 m/s	18 m/s	19 m/s	20 m/s
6.3 Hz	13.1	12.7	13.2	19.7	25.3	27.1	29.2	28.9	29.6	31.5	33.5	34.9	35.9	36.6	37.4	37.9	38.3	38.7
8 Hz	20.0	19.7	20.3	26.5	31.8	33.6	35.6	35.3	35.9	37.7	39.4	40.7	41.5	42.2	42.8	43.3	43.7	44.0
10 Hz	26.1	25.9	26.7	32.5	37.5	39.4	41.2	41.0	41.5	43.1	44.7	45.8	46.5	47.1	47.7	48.1	48.4	48.7
12.5 Hz	32.0	31.9	32.7	38.2	43.0	44.8	46.5	46.3	46.8	48.2	49.7	50.6	51.3	51.8	52.3	52.7	52.9	53.2
16 Hz	38.0	38.1	38.9	44.1	48.7	50.5	52.1	51.9	52.3	53.6	54.9	55.7	56.3	56.7	57.1	57.4	57.6	57.8
20 Hz	43.2	43.3	44.2	49.1	53.5	55.3	56.8	56.6	57.0	58.1	59.3	60.0	60.5	60.8	61.2	61.5	61.6	61.8
25 Hz	48.0	48.2	49.2	53.9	58.0	59.9	61.2	61.1	61.4	62.4	63.4	64.0	64.4	64.7	65.0	65.2	65.4	65.5
31.5 Hz	52.7	53.0	54.0	58.4	62.4	64.2	65.4	65.4	65.7	66.5	67.4	67.9	68.2	68.5	68.7	68.9	69.0	69.1
40 Hz	57.2	57.5	58.6	62.8	66.6	68.4	69.5	69.5	69.8	70.5	71.3	71.7	71.9	72.1	72.3	72.4	72.5	72.6
50 Hz	61.0	61.4	62.6	66.6	70.2	72.0	73.0	73.0	73.3	73.9	74.6	74.9	75.1	75.2	75.4	75.5	75.5	75.6
63 Hz	64.7	65.2	66.4	70.1	73.6	75.4	76.4	76.4	76.6	77.1	77.7	77.9	78.1	78.2	78.3	78.4	78.4	78.4
80 Hz	68.1	68.6	69.9	73.5	76.8	78.6	79.5	79.5	79.7	80.2	80.6	80.8	80.9	81.0	81.0	81.1	81.1	81.1
100 Hz	71.0	71.6	72.8	76.3	79.5	81.3	82.1	82.1	82.3	82.7	83.1	83.2	83.2	83.3	83.3	83.3	83.3	83.3
125 Hz	73.6	74.2	75.4	78.7	81.9	83.7	84.4	84.5	84.6	84.9	85.3	85.3	85.4	85.4	85.4	85.4	85.4	85.4
160 Hz	76.0	76.6	77.9	81.1	84.2	86.0	86.7	86.7	86.8	87.1	87.4	87.4	87.4	87.4	87.4	87.3	87.3	87.3
200 Hz	77.9	78.6	79.9	83.0	85.9	87.7	88.4	88.4	88.5	88.8	89.0	89.0	89.0	88.9	88.9	88.9	88.8	88.8
250 Hz	79.5	80.1	81.4	84.5	87.4	89.1	89.8	89.8	89.9	90.1	90.4	90.3	90.3	90.2	90.2	90.1	90.1	90.1
315 Hz	80.8	81.5	82.8	85.7	88.6	90.3	91.0	91.0	91.1	91.3	91.5	91.4	91.4	91.3	91.3	91.2	91.2	91.1
400 Hz	81.8	82.4	83.7	86.6	89.5	91.2	91.8	91.9	91.9	92.1	92.3	92.3	92.2	92.1	92.1	92.0	92.0	92.0
500 Hz	82.4	83.0	84.3	87.2	90.0	91.7	92.3	92.4	92.4	92.7	92.9	92.8	92.7	92.7	92.6	92.6	92.5	92.5
630 Hz	82.6	83.3	84.5	87.4	90.2	91.9	92.6	92.6	92.7	92.9	93.1	93.0	93.0	92.9	92.9	92.8	92.8	92.8
800 Hz	82.6	83.2	84.4	87.3	90.1	91.8	92.5	92.5	92.6	92.8	93.1	93.0	93.0	92.9	92.9	92.9	92.8	92.8
1 kHz	82.2	82.8	84.0	86.9	89.7	91.4	92.1	92.1	92.2	92.5	92.7	92.7	92.7	92.7	92.6	92.6	92.6	92.6
1.25 kHz	81.5	82.0	83.2	86.2	89.0	90.7	91.4	91.4	91.5	91.8	92.1	92.1	92.1	92.1	92.2	92.2	92.2	92.2
1.6 kHz	80.3	80.9	81.9	85.0	87.9	89.5	90.3	90.3	90.4	90.8	91.1	91.2	91.3	91.3	91.3	91.3	91.4	91.4
2 kHz	79.0	79.4	80.5	83.6	86.6	88.2	89.0	89.0	89.1	89.5	90.0	90.1	90.2	90.2	90.3	90.4	90.4	90.4
2.5 kHz	77.3	77.7	78.7	81.9	85.0	86.6	87.4	87.4	87.5	88.0	88.5	88.7	88.8	88.9	89.0	89.1	89.2	89.2
3.15 kHz	75.2	75.5	76.4	79.8	83.0	84.5	85.5	85.4	85.6	86.2	86.8	87.0	87.2	87.3	87.5	87.6	87.7	87.8
4 kHz	72.7	73.0	73.8	77.3	80.6	82.1	83.2	83.0	83.3	83.9	84.6	85.0	85.2	85.4	85.6	85.7	85.8	86.0
5 kHz	70.0	70.2	71.0	74.6	78.0	79.5	80.7	80.5	80.8	81.6	82.3	82.8	83.1	83.3	83.5	83.7	83.9	84.0
6.3 kHz	66.9	67.0	67.7	71.5	75.0	76.5	77.8	77.6	77.9	78.8	79.7	80.2	80.6	80.9	81.2	81.4	81.6	81.8
8 kHz	63.4	63.4	63.9	68.0	71.7	73.1	74.5	74.2	74.6	75.6	76.7	77.3	77.8	78.1	78.5	78.8	79.0	79.2
10 kHz	59.7	59.6	60.1	64.4	68.2	69.6	71.1	70.8	71.2	72.4	73.5	74.3	74.8	75.3	75.7	76.0	76.3	76.5
A-wgt	92.2	92.8	94.0	97.0	99.9	101.6	102.3	102.3	102.4	102.7	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0