

APPENDIX 13.6

Candidate Turbine Manufacturer's Performance Specification

Classification: Internal Purpose



Octave sound power levels with serrated trailing edge – Mode 0

Mode 0

for hub height 98 m – 107.2 dB(A)

octave sound power levels [dB(A)] at standardized wind speeds v_s										
frequency	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
31.5 Hz	68.6	70.7	73.6	77.9	78.6	78.8	78.8	78.8	78.8	78.8
63 Hz	78.6	80.7	83.6	87.9	88.6	88.9	88.9	88.9	88.9	88.9
125 Hz	85.2	87.3	90.2	94.5	95.1	95.1	95.1	95.1	95.1	95.1
250 Hz	88.1	90.2	93.9	98.2	98.8	98.8	98.8	98.8	98.8	98.8
500 Hz	89.1	91.2	96.0	100.3	100.9	101.4	101.4	101.4	101.4	101.4
1000 Hz	89.5	91.6	97.3	101.6	102.2	102.1	102.1	102.1	102.1	102.1
2000 Hz	87.7	89.8	95.4	99.7	100.4	99.6	99.6	99.6	99.6	99.6
4000 Hz	82.0	84.1	85.8	90.1	90.8	92.0	92.0	92.0	92.0	92.0
8000 Hz	72.8	74.9	77.9	82.2	82.9	84.0	84.0	84.0	84.0	84.0
total sound power level	95.5	97.6	102.3	106.6	107.2	107.2	107.2	107.2	107.2	107.2

for hub height 102 m – 107.2 dB(A)

octave sound power levels [dB(A)] at standardized wind speeds v_s										
frequency	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
31.5 Hz	68.6	70.8	73.7	78.0	78.6	78.8	78.8	78.8	78.8	78.8
63 Hz	78.6	80.8	83.7	88.0	88.6	88.9	88.9	88.9	88.9	88.9
125 Hz	85.2	87.4	90.3	94.6	95.1	95.1	95.1	95.1	95.1	95.1
250 Hz	88.1	90.3	94.0	98.3	98.8	98.8	98.8	98.8	98.8	98.8
500 Hz	89.1	91.3	96.1	100.4	100.9	101.4	101.4	101.4	101.4	101.4
1000 Hz	89.5	91.7	97.4	101.7	102.2	102.1	102.1	102.1	102.1	102.1
2000 Hz	87.7	89.9	95.5	99.8	100.4	99.6	99.6	99.6	99.6	99.6
4000 Hz	82.0	84.2	85.9	90.2	90.8	92.0	92.0	92.0	92.0	92.0
8000 Hz	72.8	75.0	78.0	82.3	82.9	84.0	84.0	84.0	84.0	84.0
total sound power level	95.5	97.7	102.4	106.7	107.2	107.2	107.2	107.2	107.2	107.2

for hub height 108 m – 107.2 dB(A)

octave sound power levels [dB(A)] at standardized wind speeds v_s										
frequency	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
31.5 Hz	68.6	70.9	73.8	78.1	78.6	78.8	78.8	78.8	78.8	78.8
63 Hz	78.6	80.9	83.8	88.1	88.6	88.9	88.9	88.9	88.9	88.9
125 Hz	85.2	87.5	90.4	94.7	95.1	95.1	95.1	95.1	95.1	95.1
250 Hz	88.1	90.4	94.1	98.4	98.8	98.8	98.8	98.8	98.8	98.8
500 Hz	89.1	91.4	96.2	100.5	100.9	101.4	101.4	101.4	101.4	101.4
1000 Hz	89.5	91.8	97.5	101.8	102.2	102.1	102.1	102.1	102.1	102.1
2000 Hz	87.7	90.0	95.6	99.9	100.4	99.6	99.6	99.6	99.6	99.6
4000 Hz	82.0	84.3	86.0	90.3	90.8	92.0	92.0	92.0	92.0	92.0
8000 Hz	72.8	75.1	78.1	82.4	82.9	84.0	84.0	84.0	84.0	84.0
total sound power level	95.5	97.8	102.5	106.8	107.2	107.2	107.2	107.2	107.2	107.2