

Appendix 9.3 – Turbine source noise terms Nordex N133

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hub height 83 m – 106.0 dB(A)

third 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
10 Hz	40.5	41.2	45.3	49.5	51.6	55.6	55.6	55.6	55.6	55.5
12.5 Hz	43.4	44.1	48.2	52.4	54.5	58.5	58.5	58.5	58.5	58.5
16 Hz	49.6	50.3	54.4	58.6	60.7	64.7	64.7	64.7	64.7	64.7
20 Hz	51.9	52.6	56.7	60.9	63.0	67.0	67.0	67.0	67.0	67.0
25 Hz	56.9	57.6	60.0	64.2	66.3	70.4	70.4	70.4	70.4	70.4
31.5 Hz	61.0	61.7	65.1	69.3	71.4	74.0	74.0	74.0	74.0	74.0
40 Hz	65.6	66.3	68.7	72.9	75.0	77.0	77.0	77.0	77.0	77.0
50 Hz	67.3	68.0	71.9	76.1	78.2	80.4	80.4	80.4	80.4	80.4
63 Hz	71.9	72.6	75.8	80.0	82.1	83.7	83.7	83.7	83.7	83.7
80 Hz	73.8	74.5	79.3	83.5	85.6	86.3	86.3	86.3	86.3	86.3
100 Hz	75.8	76.5	83.0	87.2	89.3	89.5	89.5	89.5	89.5	89.5
125 Hz	78.5	79.2	83.2	87.4	89.5	89.1	89.1	89.1	89.1	89.1
160 Hz	80.3	81.0	84.6	88.8	90.9	90.7	90.7	90.7	90.7	90.7
200 Hz	81.4	82.1	86.3	90.5	92.6	91.9	91.9	91.9	91.9	91.9
250 Hz	82.1	82.8	87.2	91.4	93.5	91.9	91.9	91.9	91.9	91.9
315 Hz	83.0	83.7	88.6	92.8	94.9	92.6	92.6	92.6	92.6	92.6
400 Hz	82.2	82.9	88.2	92.4	94.5	92.1	92.1	92.1	92.1	92.1
500 Hz	81.7	82.4	87.9	92.1	94.2	93.0	93.0	93.0	93.0	93.0
630 Hz	82.1	82.8	88.9	93.1	95.2	93.6	93.6	93.6	93.6	93.6
800 Hz	81.4	82.1	88.2	92.4	94.5	93.8	93.8	93.8	93.8	93.8
1000 Hz	82.0	82.7	89.3	93.5	95.6	95.3	95.3	95.3	95.3	95.3
1250 Hz	81.3	82.0	88.8	93.0	95.1	95.0	95.0	95.0	95.0	95.0
1600 Hz	81.0	81.7	88.3	92.5	94.6	94.7	94.7	94.7	94.7	94.7
2000 Hz	80.4	81.1	87.4	91.6	93.7	95.0	95.0	95.0	95.0	95.0
2500 Hz	79.5	80.2	86.8	91.0	93.1	96.0	96.0	96.0	96.0	96.0
3150 Hz	78.5	79.2	85.0	89.2	91.3	94.5	94.5	94.5	94.5	94.5
4000 Hz	78.9	79.6	83.0	87.2	89.3	92.8	92.8	92.8	92.8	92.8
5000 Hz	77.2	77.9	80.7	84.9	87.0	90.8	90.8	90.8	90.8	90.8
6300 Hz	73.5	74.2	77.6	81.8	83.9	86.4	86.4	86.4	86.4	86.4
8000 Hz	66.9	67.6	71.7	75.9	78.0	77.7	77.7	77.7	77.7	77.7
10000 Hz	62.8	63.5	66.0	70.2	72.3	71.5	71.5	71.5	71.5	71.5
Total sound power level	93.5	94.2	99.7	103.9	106.0	106.0	106.0	106.0	106.0	106.0