

Appendix 14.1:

Wind Turbine Coordinates and Noise Data

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A14.1 Table 1- Topographical Adjustment Table and coordinates

Wind Farm /Turbine	Hub	ID	Noise Sensitive Receptor														X	Y	Turbine Considered
			1	2	3	4	5	6	7	8	9	10	11	12	13	14			
SR Variation-WT1	138.5	1	0	0	0	0	3	-2	0	-2	-2	-2	0	0	0	0	262208	595979	Nordex N163/6.X 7MW STE Blades Mode 0
SR Variation-WT2	138.5	2	0	0	0	0	3	-2	0	-2	-2	-2	0	0	0	0	262752	595635	
SR Variation-WT3	138.5	3	0	0	0	0	3	-2	0	-2	-2	0	0	0	0	0	261917	595432	
SR Variation-WT4	138.5	4	0	0	0	0	3	-2	0	0	-2	-2	0	0	0	0	262752	595076	
SR Variation-WT5	138.5	5	0	0	0	0	3	-2	0	-2	-2	0	0	0	0	0	261921	594770	
SR Variation-WT6	138.5	6	0	0	0	0	3	-2	0	0	-2	0	0	0	0	0	261969	593817	
SR Variation-WT7	138.5	7	0	0	0	0	0	0	0	0	0	-2	-2	0	0	0	262685	593323	
SR Variation-WT8	138.5	8	0	0	0	0	3	0	0	0	0	0	0	0	0	0	261654	593306	
SR Variation-WT9	138.5	9	0	0	0	0	3	0	0	0	0	0	0	0	0	0	262467	592647	
SR Variation-WT10	138.5	10	0	3	0	0	3	0	0	0	0	0	0	0	0	0	261496	592707	
SR Variation-WT11	138.5	11	0	3	0	0	3	3	0	0	0	0	0	0	0	0	261878	592202	
SR Consented-WT1	91.5	12	0	0	0	0	3	-2	0	-2	-2	-2	-2	0	0	0	261952	595637	Vestas V117 4.2 MW Serrated Blades Mode 0
SR Consented-WT2	91.5	13	0	0	0	0	3	-2	3	-2	-2	-2	0	0	0	0	262221	595349	
SR Consented-WT3	91.5	14	0	3	0	0	3	-2	3	-2	-2	-2	-2	-2	0	0	262915	595224	
SR Consented-WT4	91.5	15	-2	0	-2	-2	3	-2	0	-2	-2	-2	-2	0	0	0	261734	595199	
SR Consented-WT5	91.5	16	0	0	0	0	3	-2	0	-2	-2	-2	-2	0	0	0	262475	594930	
SR Consented-WT6	91.5	17	-2	0	0	0	3	-2	0	-2	-2	-2	0	0	0	0	261915	594785	
SR Consented-WT7	91.5	18	-2	0	0	0	3	-2	0	-2	-2	-2	0	0	0	0	262100	594427	
SR Consented-WT8	91.5	19	0	0	0	0	3	-2	0	-2	-2	-2	-2	-2	0	0	262404	594135	
SR Consented-WT9	91.5	20	-2	0	0	0	3	-2	0	-2	-2	-2	0	0	0	0	261985	593849	
SR Consented-WT10	91.5	21	0	0	0	0	3	-2	0	0	-2	-2	-2	0	0	0	262325	593596	
SR Consented-WT11	91.5	22	-2	3	0	0	3	3	0	-2	-2	0	0	0	0	0	261738	593413	
SR Consented-WT12	91.5	23	0	3	0	0	3	-2	0	0	0	-2	-2	-2	0	0	262667	593305	
SR Consented-WT13	91.5	24	0	3	0	0	3	0	0	0	0	-2	0	0	0	0	262123	593084	
SR Consented-WT14	91.5	25	-2	3	0	0	3	0	0	-2	-2	0	0	0	0	0	261438	592977	
SR Consented-WT15	91.5	26	0	3	0	0	3	3	0	0	0	-2	-2	-2	0	0	262482	592799	
SR Consented-WT16	91.5	27	-2	3	0	0	3	3	0	0	0	0	0	0	0	0	261690	592707	
SR Consented-WT17	91.5	28	0	3	0	0	3	3	0	0	0	0	0	0	0	0	262045	592402	
QH-WT1	115	29	-2	-2	-2	-2	3	-2	-2	-2	-2	0	0	0	0	0	258471	594886	Siemens Gamesa SG 6.0-170 6 Standard Blades AM0
QH-WT2	115	30	-2	-2	-2	-2	3	-2	-2	-2	-2	0	0	3	0	0	259026	595416	
QH-WT3	115	31	-2	-2	-2	-2	0	-2	-2	-2	-2	0	0	0	0	0	257624	594845	
QH-WT4	115	32	-2	-2	-2	-2	0	-2	-2	-2	-2	0	0	0	0	0	257699	595372	
QH-WT5	115	33	-2	-2	-2	-2	0	-2	-2	-2	-2	0	0	0	0	0	259785	594749	
QH-WT6	115	34	-2	-2	-2	-2	0	-2	-2	-2	-2	0	0	0	0	0	258811	594380	
QH-WT7	115	35	-2	-2	-2	-2	0	-2	-2	-2	-2	0	0	0	0	0	258222	593893	
QH-WT8	115	36	-2	-2	-2	-2	0	-2	-2	-2	-2	0	0	0	0	0	259127	593842	
QH-WT9	115	37	-2	-2	-2	-2	0	-2	-2	-2	-2	0	0	0	0	0	259642	594169	
QH-WT10	115	38	-2	0	-2	-2	0	-2	0	-2	-2	0	0	0	0	0	260607	594374	
QH-WT11	115	39	0	0	-2	-2	3	-2	0	-2	-2	0	0	0	0	0	260797	595109	
QH-WT12	115	40	-2	0	0	0	3	-2	0	-2	-2	0	0	0	0	0	261135	593851	
QH-WT13	115	41	-2	0	0	0	0	0	0	-2	-2	0	0	0	0	0	260785	593404	
QH-WT14	115	42	-2	0	0	0	0	0	-2	-2	-2	0	0	0	0	0	260426	592953	
WR_WT1	69	43	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	261413	600262	Vestas V112 3.6MW Standard Blades PO1-0S
WR_WT2	69	44	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	261973	600511	
WR_WT3	69	45	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	262184	600293	
WR_WT4	69	46	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	261661	600073	
WR_WT5	69	47	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	261347	599690	
WR_WT6	69	48	3	-2	3	3	3	-2	-2	-2	-2	-2	-2	3	-2	-2	261875	599862	
WR_WT7	69	49	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	0	-2	-2	-2	261502	599443	
WR_WT8	69	50	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	261706	599210	
WR_WT9	69	51	3	-2	3	3	3	-2	3	-2	-2	-2	-2	-2	-2	-2	262601	599996	
WR_WT10	69	52	3	-2	3	3	3	-2	3	-2	-2	-2	-2	-2	-2	-2	262258	599983	
WR_WT11	69	53	-2	-2	3	3	3	-2	-2	-2	-2	-2	-2	-2	-2	-2	261978	599584	
WR_WT12	69	54	3	-2	3	3	3	-2	3	-2	-2	-2	-2	-2	-2	-2	262334	599611	

A14.1 Table 2- Wind Turbine Noise Data assumptions

Sound Power Level Data assumptions for noise modelling

Wind Farm	Wind Turbine	Hub height of source data provided (see A14.1 Table 1 for actual height modelled per turbine)	Uncertainty added by TNEI	Reference Wind Speed (ms^{-1}) Standardised to 10 m Height									
				3	4	5	6	7	8	9	10	11	12
Shepherd's Rig Variation (SR Variation)	Nordex N163/6.X 7MW STE Blades Mode 0	118.5	2	Under NDA, available on request. Maximum sound power is 108.6dB									
Shepherd's Rig Consented (SR Consented)	Vestas V117 4.2 MW Serrated Blades Mode 0	78	2	95.0	97.6	101.8	105.5	107.7	108.0	108.0	108.0	108.0	108.0
Quantans Hill (QH)	Siemens Gamesa SG 6.0-170 6 Standard Blades AM0	115	2	Under NDA, available on request. Maximum sound power is 108dB									
Windy Rig (WR)	Vestas V112 3.6MW Standard Blades PO1-05	69	2	96.0	98.0	102.3	106.2	108.5	108.9	108.9	108.9	108.9	108.9

Octave Band Data assumed for noise predictions

Wind Farm	Wind Turbine	Reference Wind Speed (m/s)	Octave Band (Hz)								
			63	125	250	500	1000	2000	4000	8000	Overall
Shepherd's Rig Variation (SR Variation)	Nordex N163/6.X 7MW STE Blades Mode 0	10	Under NDA, available on request.								
Shepherd's Rig Consented (SR Consented)	Vestas V117 4.2 MW Serrated Blades Mode 0	7	87.8	95.0	99.8	102.1	101.9	99.2	94.0	86.3	107.7
Quantans Hill (QH)	Siemens Gamesa SG 6.0-170 6 Standard Blades AM0	5	Under NDA, available on request.								
Windy Rig (WR)	Vestas V112 3.6MW Standard Blades PO1-05	7	87.5	95.9	100.5	102.5	103.8	99.9	95.3	82.4	108.5