Technical Appendix 10.3: Cumulative Modelling Assumptions

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Appendix 10.3. Cumulative Modelling Assumptions

Introduction

A10.3.1 This technical appendix contains the input noise data for the cumulative operational noise modelling presented in **Technical Appendix 10.4**. This technical appendix relates solely to the Proposed Development (as defined in **Chapter 4: Development Description** of the EIA Report). The Likely Grid Connection Route (as defined in **Chapter 4**) is addressed in **Chapter 10: Noise and Vibration** of the EIA Report.

Turbine Locations and Models

A10.3.2 **Table 10.3.1** below shows the grid coordinates of each turbine included in the cumulative operational noise modelling, together with the assumed turbine model and hub height. That rationale for determining the wind turbine developments scoped into the operational noise assessment is discussed in the **Chapter 10.**

Table A10.3.1 Cumulative Development Turbine Modelling Assumptions

Wind Farm	Turbine ID	Easting	Northing	Hub Height (m)	Turbine Model
Blacklaw Hill	BH1	245950	650040	50.0	DW54
Clonherb	Cl1	245914	646619	44.0	E33
Moorshield	MS1	251621	649554	81.0	E138
Moorshield	MS2	251643	649212	81.0	E138
Moorshield	MS3	252108	649522	81.0	E138
Whitelee	WP0_1	251865	646486	63.5	SWT_23_93
Whitelee	WP0_2	252240	646200	63.5	SWT_23_93
Whitelee	WP0_3	251554	647175	63.5	SWT_23_93
Whitelee	WP0_4	252036	646954	63.5	SWT_23_93
Whitelee	WP0_5	252898	646093	63.5	SWT_23_93
Whitelee	WP0_6	253674	646481	63.5	SWT_23_93
Whitelee	WP0_7	252237	647287	63.5	SWT_23_93
Whitelee	WP0_8	252003	648006	63.5	SWT_23_93
Whitelee	WP0_9	252332	648190	63.5	SWT_23_93
Whitelee	WP0_10	252653	647982	63.5	SWT_23_93
Whitelee	WP0_11	252995	647703	63.5	SWT_23_93
Whitelee	WP0_12	254073	646971	63.5	SWT_23_93
Whitelee	WP0_13	254357	646644	63.5	SWT_23_93
Whitelee	WP0_14	254694	646380	63.5	SWT_23_93
Whitelee	WP0_15	255003	646143	63.5	SWT_23_93
Whitelee	WP0_16	255360	645795	63.5	SWT_23_93
Whitelee	WP0_17	255545	645470	69.0	SWT_23_82

Wind Farm	Turbine ID	Easting	Northing	Hub Height (m)	Turbine Model
Whitelee	WP0_18	256025	645198	63.5	SWT_23_93
Whitelee	WP0_19	256441	645338	63.5	SWT_23_93
Whitelee	WP0_20	258995	643245	63.5	SWT_23_93
Whitelee	WP0_21	259230	642683	69.0	SWT_23_82
Whitelee	WP0_22	259627	642531	63.5	SWT_23_93
Whitelee	WP0_23	260088	642430	63.5	SWT_23_93
Whitelee	WP0_24	252642	648478	63.5	SWT_23_93
Whitelee	WP0_25	253013	648237	63.5	SWT_23_93
Whitelee	WP0_26	253308	647985	63.5	SWT_23_93
Whitelee	WP0_27	254122	647355	63.5	SWT_23_93
Whitelee	WP0_28	254437	647156	63.5	SWT_23_93
Whitelee	WP0_29	254838	646891	63.5	SWT_23_93
Whitelee	WP0_30	255068	646653	63.5	SWT_23_93
Whitelee	WP0_31	255383	646376	63.5	SWT_23_93
Whitelee	WP0_32	255748	646090	63.5	SWT_23_93
Whitelee	WP0_33	255939	645597	63.5	SWT_23_93
Whitelee	WP0_34	256398	645696	63.5	SWT_23_93
Whitelee	WP0_35	256804	645428	63.5	SWT_23_93
Whitelee	WP0_36	258309	644310	69.0	SWT_23_82
Whitelee	WP0_37	259045	643680	69.0	SWT_23_82
Whitelee	WP0_38	259435	643094	69.0	SWT_23_82
Whitelee	WP0_39	259886	642963	63.5	SWT_23_93
Whitelee	WP0_40	253038	648722	63.5	SWT_23_93
Whitelee	WP0_41	253350	648492	63.5	SWT_23_93
Whitelee	WP0_42	253619	648250	63.5	SWT_23_93
Whitelee	WP0_43	254042	647940	63.5	SWT_23_93
Whitelee	WP0_44	254651	647521	63.5	SWT_23_93
Whitelee	WP0_45	254958	647222	63.5	SWT_23_93
Whitelee	WP0_46	255268	646993	63.5	SWT_23_93
Whitelee	WP0_47	255547	646751	63.5	SWT_23_93
Whitelee	WP0_48	257108	645774	63.5	SWT_23_93

Wind Farm	Turbine ID	Easting	Northing	Hub Height (m)	Turbine Model
Whitelee	WP0_49	258352	644717	63.5	SWT_23_93
Whitelee	WP0_50	258695	644250	69.0	SWT_23_82
Whitelee	WP0_51	259154	644141	63.5	SWT_23_93
Whitelee	WP0_52	259510	643570	69.0	SWT_23_82
Whitelee	WP0_53	253432	648870	63.5	SWT_23_93
Whitelee	WP0_54	253730	648610	69.0	SWT_23_82
Whitelee	WP0_55	254130	648329	63.5	SWT_23_93
Whitelee	WP0_56	254483	648079	63.5	SWT_23_93
Whitelee	WP0_57	254883	647762	63.5	SWT_23_93
Whitelee	WP0_58	255268	647476	63.5	SWT_23_93
Whitelee	WP0_59	255628	647243	63.5	SWT_23_93
Whitelee	WP0_60	257469	645947	63.5	SWT_23_93
Whitelee	WP0_61	257512	645479	63.5	SWT_23_93
Whitelee	WP0_62	257998	645305	63.5	SWT_23_93
Whitelee	WP0_63	258472	645094	63.5	SWT_23_93
Whitelee	WP0_64	258787	644640	69.0	SWT_23_82
Whitelee	WP0_65	259295	644480	69.0	SWT_23_82
Whitelee	WP0_66	259508	644001	69.0	SWT_23_82
Whitelee	WP0_67	260049	643838	69.0	SWT_23_82
Whitelee	WP0_68	253761	649187	63.5	SWT_23_93
Whitelee	WP0_69	254087	648927	63.5	SWT_23_93
Whitelee	WP0_70	254436	648693	63.5	SWT_23_93
Whitelee	WP0_71	254735	648384	63.5	SWT_23_93
Whitelee	WP0_72	252340	647751	63.5	SWT_23_93
Whitelee	WP0_73	255384	647926	63.5	SWT_23_93
Whitelee	WP0_74	255721	647650	63.5	SWT_23_93
Whitelee	WP0_75	257780	646270	63.5	SWT_23_93
Whitelee	WP0_76	257877	645853	63.5	SWT_23_93
Whitelee	WP0_77	258285	645639	63.5	SWT_23_93
Whitelee	WP0_78	258676	645468	63.5	SWT_23_93
Whitelee	WP0_79	259342	645706	63.5	SWT_23_93

Wind Farm	Turbine ID	Easting	Northing	Hub Height (m)	Turbine Model
Whitelee	WP0_80	259085	644941	63.5	SWT_23_93
Whitelee	WP0_81	259653	644735	69.0	SWT_23_82
Whitelee	WP0_82	259855	644335	69.0	SWT_23_82
Whitelee	WP0_83	260209	644169	69.0	SWT_23_82
Whitelee	WP0_84	254246	646147	63.5	SWT_23_93
Whitelee	WP0_85	254615	645914	63.5	SWT_23_93
Whitelee	WP0_86	255092	648707	63.5	SWT_23_93
Whitelee	WP0_87	255492	648465	63.5	SWT_23_93
Whitelee	WP0_88	255833	648128	69.0	SWT_23_82
Whitelee	WP0_89	258190	646676	63.5	SWT_23_93
Whitelee	WP0_90	258194	646151	63.5	SWT_23_93
Whitelee	WP0_91	258583	646012	63.5	SWT_23_93
Whitelee	WP0_92	258966	645859	63.5	SWT_23_93
Whitelee	WP0_93	259096	645371	63.5	SWT_23_93
Whitelee	WP0_94	259544	645185	63.5	SWT_23_93
Whitelee	WP0_95	259934	645080	69.0	SWT_23_82
Whitelee	WP0_96	258620	646854	63.5	SWT_23_93
Whitelee	WP0_97	258592	646453	63.5	SWT_23_93
Whitelee	WP0_98	258950	646367	63.5	SWT_23_93
Whitelee	WP0_99	259380	646203	63.5	SWT_23_93
Whitelee	WP0_100	259766	645588	63.5	SWT_23_93
Whitelee	WP0_101	260130	645460	69.0	SWT_23_82
Whitelee	WP0_102	258945	646723	69.0	SWT_23_82
Whitelee	WP0_103	259436	646600	63.5	SWT_23_93
Whitelee	WP0_104	259789	646440	63.5	SWT_23_93
Whitelee	WP0_105	259740	646060	63.5	SWT_23_93
Whitelee	WP0_106	255015	645653	63.5	SWT_23_93
Whitelee	WP0_107	260613	645771	63.5	SWT_23_93
Whitelee	WP0_108	259088	647180	69.0	SWT_23_82
Whitelee	WP0_109	259497	647031	63.5	SWT_23_93
Whitelee	WP0_110	259904	643398	69.0	SWT_23_82

Wind Farm	Turbine ID	Easting	Northing	Hub Height (m)	Turbine Model
Whitelee	WP0_111	260168	646321	63.5	SWT_23_93
Whitelee	WP0_112	260583	646180	63.5	SWT_23_93
Whitelee	WP0_113	260999	645636	69.0	SWT_23_82
Whitelee	WP0_114	259815	647350	69.0	SWT_23_82
Whitelee	WP0_115	259909	646878	63.5	SWT_23_93
Whitelee	WP0_116	260285	646740	63.5	SWT_23_93
Whitelee	WP0_117	260695	646599	63.5	SWT_23_93
Whitelee	WP0_118	261029	646025	69.0	SWT_23_82
Whitelee	WP0_119	261458	645878	69.0	SWT_23_82
Whitelee	WP0_120	261965	645319	69.0	SWT_23_82
Whitelee	WP0_121	262335	645132	69.0	SWT_23_82
Whitelee	WP0_122	260175	647189	69.0	SWT_23_82
Whitelee	WP0_123	260749	647040	63.5	SWT_23_93
Whitelee	WP0_124	262415	646410	69.0	SWT_23_82
Whitelee	WP0_125	261250	646381	69.0	SWT_23_82
Whitelee	WP0_126	261696	646281	69.0	SWT_23_82
Whitelee	WP0_127	262073	645699	69.0	SWT_23_82
Whitelee	WP0_128	262496	645522	69.0	SWT_23_82
Whitelee	WP0_129	260725	647478	63.5	SWT_23_93
Whitelee	WP0_130	261157	647325	69.0	SWT_23_82
Whitelee	WP0_131	261158	646913	69.0	SWT_23_82
Whitelee	WP0_132	261596	646747	69.0	SWT_23_82
Whitelee	WP0_133	262016	646599	69.0	SWT_23_82
Whitelee	WP0_134	262118	646125	69.0	SWT_23_82
Whitelee	WP0_135	262510	645990	69.0	SWT_23_82
Whitelee	WP0_136	261230	647720	63.5	SWT_23_93
Whitelee	WP0_137	261599	647175	63.5	SWT_23_93
Whitelee	WP0_138	261635	647595	63.5	SWT_23_93
Whitelee	WP0_139	262004	647048	69.0	SWT_23_82
Whitelee	WP0_140	262797	646612	63.5	SWT_23_93
Whitelee Extension Phase 1	WP1_1	254912	645184	90.0	ECO100

Wind Farm	Turbine ID	Easting	Northing	Hub Height (m)	Turbine Model
Whitelee Extension Phase 1	WP1_2	254408	645415	90.0	ECO100
Whitelee Extension Phase 1	WP1_3	253987	645630	90.0	ECO100
Whitelee Extension Phase 1	WP1_4	253434	645468	90.0	ECO100
Whitelee Extension Phase 1	WP1_5	252913	645477	90.0	ECO100
Whitelee Extension Phase 1	WP1_6	252451	645260	90.0	ECO100
Whitelee Extension Phase 1	WP1_7	251961	645168	90.0	ECO100
Whitelee Extension Phase 1	WP1_8	255406	644943	90.0	ECO100
Whitelee Extension Phase 1	WP1_9	255931	644763	90.0	ECO100
Whitelee Extension Phase 1	WP1_10	254885	644605	90.0	ECO100
Whitelee Extension Phase 1	WP1_11	255413	644457	90.0	ECO100
Whitelee Extension Phase 1	WP1_12	255904	644311	90.0	ECO100
Whitelee Extension Phase 1	WP1_13	254330	644942	90.0	ECO100
Whitelee Extension Phase 1	WP1_14	253901	645145	90.0	ECO100
Whitelee Extension Phase 1	WP1_15	253422	645077	90.0	ECO100
Whitelee Extension Phase 1	WP1_16	252971	645083	90.0	ECO100
Whitelee Extension Phase 1	WP1_17	252977	644695	90.0	ECO100
Whitelee Extension Phase 1	WP1_18	252490	644738	90.0	ECO100
Whitelee Extension Phase 1	WP1_19	251987	644679	90.0	ECO100
Whitelee Extension Phase 1	WP1_20	252591	644288	90.0	ECO100
Whitelee Extension Phase 1	WP1_21	254992	644149	90.0	ECO100
Whitelee Extension Phase 1	WP1_22	255479	643971	90.0	ECO100
Whitelee Extension Phase 1	WP1_23	256014	643822	90.0	ECO100
Whitelee Extension Phase 1	WP1_24	256261	643494	90.0	ECO100
Whitelee Extension Phase 1	WP1_25	256560	643186	90.0	ECO100
Whitelee Extension Phase 1	WP1_26	256938	643007	90.0	ECO100
Whitelee Extension Phase 1	WP1_27	257148	642601	90.0	ECO100
Whitelee Extension Phase 1	WP1_28	256761	642233	90.0	ECO100
Whitelee Extension Phase 1	WP1_29	255110	643600	90.0	ECO100
Whitelee Extension Phase 1	WP1_30	255580	643551	90.0	ECO100
Whitelee Extension Phase 1	WP1_31	255809	643185	90.0	ECO100
Whitelee Extension Phase 1	WP1_32	256133	642930	90.0	ECO100

Wind Farm	Turbine ID	Easting	Northing	Hub Height (m)	Turbine Model
Whitelee Extension Phase 1	WP1_33	256512	642696	90.0	ECO100
Whitelee Extension Phase 1	WP1_34	255333	643112	90.0	ECO100
Whitelee Extension Phase 1	WP1_35	255644	642749	90.0	ECO100
Whitelee Extension Phase 1	WP1_36	256076	642500	90.0	ECO100
Whitelee Extension Phase 2	WP2_1	254371	644467	90.0	ECO100
Whitelee Extension Phase 2	WP2_2	254054	644191	90.0	ECO100
Whitelee Extension Phase 2	WP2_3	253382	644576	90.0	ECO100
Whitelee Extension Phase 2	WP2_4	253913	644699	90.0	ECO100
Whitelee Extension Phase 2	WP2_5	253478	644202	90.0	ECO100
Whitelee Extension Phase 2	WP2_6	253037	644212	90.0	ECO100
Whitelee Extension Phase 2	WP2_7	254519	643986	90.0	ECO100
Whitelee Extension Phase 2	WP2_8	254068	643635	90.0	ECO100
Whitelee Extension Phase 2	WP2_9	254646	643497	90.0	ECO100
Whitelee Extension Phase 2	WP2_10	254878	642998	90.0	ECO100
Whitelee Extension Phase 2	WP2_11	255139	642604	90.0	ECO100
Whitelee Extension Phase 2	WP2_12	255078	642123	90.0	ECO74
Whitelee Extension Phase 2	WP2_13	255516	642215	90.0	ECO100
Whitelee Extension Phase 2	WP2_14	254582	642335	90.0	ECO100
Whitelee Extension Phase 2	WP2_15	254364	641896	90.0	ECO74
Whitelee Extension Phase 2	WP2_16	254440	642855	90.0	ECO100
Whitelee Extension Phase 2	WP2_17	254210	643236	90.0	ECO74
Whitelee Extension Phase 2	WP2_18	253687	643143	90.0	ECO100
Whitelee Extension Phase 2	WP2_19	253423	642723	90.0	ECO100
Whitelee Extension Phase 2	WP2_20	253828	642597	90.0	ECO100
Whitelee Extension Phase 2	WP2_21	253528	642276	90.0	ECO74
Whitelee Extension Phase 2	WP2_22	254031	642229	90.0	ECO100
Whitelee Extension Phase 2	WP2_23	253779	641896	90.0	ECO100
Whitelee Extension Phase 2	WP2_24	254147	641566	90.0	ECO100
Whitelee Extension Phase 2	WP2_25	253650	641497	90.0	ECO100
Whitelee Extension Phase 2	WP2_26	253245	641313	90.0	ECO74
Whitelee Extension Phase 2	WP2_27	254025	641167	70.0	ECO74

Wind Farm	Turbine ID	Easting	Northing	Hub Height (m)	Turbine Model
Whitelee Extension Phase 2	WP2_28	253498	640955	70.0	ECO100
Whitelee Extension Phase 2	WP2_29	253430	640405	70.0	ECO100
Whitelee Extension Phase 2	WP2_30	253030	640809	70.0	ECO100
Whitelee Extension Phase 2	WP2_31	252705	641156	90.0	ECO100
Whitelee Extension Phase 2	WP2_32	253889	640730	70.0	ECO100
Whitelee Extension Phase 2	WP2_33	254322	640772	70.0	ECO100
Whitelee Extension Phase 2	WP2_34	256462	644939	90.0	ECO100
Whitelee Extension Phase 2	WP2_35	256359	644510	90.0	ECO100
Whitelee Extension Phase 2	WP2_36	256491	644086	90.0	ECO100
Whitelee Extension Phase 2	WP2_37	256739	643724	90.0	ECO100
Whitelee Extension Phase 2	WP2_38	257164	643860	90.0	ECO100
Whitelee Extension Phase 2	WP2_39	257065	643438	90.0	ECO100

Sound Power Levels

A10.3.3 The source sound power levels for each of the turbine models included in the cumulative operational noise modelling are shown in the following tables. The source data includes plus 2 dB to account for uncertainty except for the EWT DW54 which includes 2.6 dB of uncertainty as it is based on a single test measurement report.

Table A10.3.2 EWT DW 54 with a 50 m hub height (dB L_{WA})

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
3	81.0	88.0	93.0	96.0	93.0	91.0	89.0	83.0	100.4
4	81.0	88.0	93.0	96.0	93.0	91.0	89.0	83.0	100.4
5	81.0	88.0	93.0	96.0	93.0	91.0	89.0	83.0	100.4
6	82.3	89.3	94.3	97.3	94.3	92.3	90.3	84.3	101.7
7	83.3	90.3	95.3	98.3	95.3	93.3	91.3	85.3	102.7
8	84.1	91.1	96.1	99.1	96.1	94.1	92.1	86.1	103.5
9	84.6	91.6	96.6	99.6	96.6	94.6	92.6	86.6	104.0
10	84.8	91.8	96.8	99.8	96.8	94.8	92.8	86.8	104.2
11	84.8	91.8	96.8	99.8	96.8	94.8	92.8	86.8	104.2
12	84.8	91.8	96.8	99.8	96.8	94.8	92.8	86.8	104.2

Table A10.3.3 Enercon E33 with a 44 m hub height (dB L_{WA})

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
3	70.9	79.9	80.3	83.9	86.8	85.5	76.6	66.4	91.3
4	70.9	79.9	80.3	83.9	86.8	85.5	76.6	66.4	91.3
5	72.6	81.6	82.0	85.6	88.5	87.2	78.3	68.1	93.0
6	77.6	86.6	87.0	90.6	93.5	92.2	83.3	73.1	98.0
7	80.5	89.5	89.9	93.5	96.4	95.1	86.2	76.0	100.9
8	81.4	90.4	90.8	94.4	97.3	96.0	87.1	76.9	101.8
9	81.6	90.6	91.0	94.6	97.5	96.2	87.3	77.1	102.0
10	81.6	90.6	91.0	94.6	97.5	96.2	87.3	77.1	102.0
11	81.6	90.6	91.0	94.6	97.5	96.2	87.3	77.1	102.0
12	81.6	90.6	91.0	94.6	97.5	96.2	87.3	77.1	102.0

Table A10.3.4 Enercon E138 with an 81 m hub height (dB L_{WA})

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
3	77.6	85.1	91.3	93.3	95.9	92.6	82.0	62.8	99.9
4	83.3	89.9	94.9	97.8	99.6	96.3	87.2	69.4	103.8
5	87.4	93.6	97.8	101.2	102.8	99.5	91.0	73.7	107.1
6	88.7	94.6	98.3	101.7	103.8	100.2	91.8	74.7	107.9
7	89.4	95.1	98.4	101.7	103.9	100.3	92.1	75.1	108.0
8	90.0	95.4	98.1	101.3	104.0	100.6	92.7	75.5	108.0
9	90.5	95.5	97.7	100.9	104.0	101.1	93.3	74.9	108.0
10	90.8	95.7	97.6	100.6	104.0	101.4	93.2	74.3	108.0
11	90.8	95.7	97.6	100.6	104.0	101.4	93.2	74.3	108.0
12	77.6	85.1	91.3	93.3	95.9	92.6	82.0	62.8	99.9

Table A10.3.5 Siemens SWT 2.3-93 with a 63.5 m hub height (dB L_{WA})

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
3	71.5	82.3	89.1	88.5	84.8	81.8	78.3	72.1	93.5
4	71.5	82.3	89.1	88.5	84.8	81.8	78.3	72.1	93.5

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
5	78.3	89.1	95.9	95.3	91.6	88.6	85.1	78.9	100.3
6	83.2	94.0	100.8	100.2	96.5	93.5	90.0	83.8	105.3
7	86.0	95.4	102.1	102.3	99.3	95.9	91.0	86.7	107.1
8	86.6	95.6	102.3	102.7	99.8	96.3	91.0	87.3	107.4
9	86.6	95.6	102.3	102.7	99.8	96.3	91.0	87.3	107.4
10	86.6	95.6	102.3	102.7	99.8	96.3	91.0	87.3	107.4
11	86.6	95.6	102.3	102.7	99.8	96.3	91.0	87.3	107.4
12	86.6	95.6	102.3	102.7	99.8	96.3	91.0	87.3	107.4

Table A10.3.6Siemens SWT 2.3-82 with a 69 m hub height (dB L_{WA})

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
3	64.9	76.7	85.5	86.6	86.1	84.0	81.8	75.6	92.3
4	64.9	76.7	85.5	86.6	86.1	84.0	81.8	75.6	92.3
5	72.3	84.1	92.9	94.0	93.5	91.4	89.2	83.0	99.7
6	77.2	89.0	97.8	98.9	98.4	96.3	94.1	87.9	104.6
7	79.6	89.8	98.5	100.5	100.7	98.1	96.2	90.3	106.3
8	79.8	89.8	98.5	100.6	100.9	98.3	96.4	90.6	106.5
9	79.8	89.8	98.5	100.6	100.9	98.3	96.4	90.6	106.5
10	79.8	89.8	98.5	100.6	100.9	98.3	96.4	90.6	106.5
11	79.8	89.8	98.5	100.6	100.9	98.3	96.4	90.6	106.5
12	79.8	89.8	98.5	100.6	100.9	98.3	96.4	90.6	106.5

Table A10.3.7 ECO100 with a 90 m hub height (dB L_{WA})

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
3	81.2	89.1	93.4	94.0	92.9	89.8	85.3	76.0	99.5
4	81.2	89.1	93.4	94.0	92.9	89.8	85.3	76.0	99.5
5	81.5	89.4	93.7	94.3	93.2	90.1	85.6	76.3	99.8
6	84.9	92.8	97.1	97.7	96.6	93.5	89.0	79.7	103.2
7	87.7	95.6	99.9	100.5	99.4	96.3	91.8	82.5	106.0

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
8	88.7	96.6	100.9	101.5	100.4	97.3	92.8	83.5	107.1
9	89.1	97.0	101.3	101.9	100.8	97.7	93.2	83.9	107.4
10	89.1	97.0	101.3	101.9	100.8	97.7	93.2	83.9	107.4
11	89.1	97.0	101.3	101.9	100.8	97.7	93.2	83.9	107.4
12	89.1	97.0	101.3	101.9	100.8	97.7	93.2	83.9	107.4

Table A10.3.8 ECO74 with a 90 m hub height (dB L_{WA})

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
3	78.6	86.5	90.8	91.4	90.3	87.2	82.7	73.4	96.9
4	78.6	86.5	90.8	91.4	90.3	87.2	82.7	73.4	96.9
5	78.9	86.8	91.1	91.7	90.6	87.5	83.0	73.7	97.2
6	82.3	90.2	94.5	95.1	94.0	90.9	86.4	77.1	100.6
7	84.6	92.5	96.8	97.4	96.3	93.2	88.7	79.4	102.9
8	86.2	94.1	98.4	99.0	97.9	94.8	90.3	81.0	104.5
9	86.6	94.5	98.8	99.4	98.3	95.2	90.7	81.4	104.9
10	86.5	94.4	98.7	99.3	98.2	95.1	90.6	81.3	104.8
11	86.5	94.4	98.7	99.3	98.2	95.1	90.6	81.3	104.8
12	86.5	94.4	98.7	99.3	98.2	95.1	90.6	81.3	104.8

Table A10.3.9 ECO74 with a 70 m hub height (dB L_{WA})

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
3	78.6	86.5	90.8	91.4	90.3	87.2	82.7	73.4	96.9
4	78.6	86.5	90.8	91.4	90.3	87.2	82.7	73.4	96.9
5	78.6	86.5	90.8	91.4	90.3	87.2	82.7	73.4	96.9
6	81.7	89.6	93.9	94.5	93.4	90.3	85.8	76.5	100.0
7	84.1	92.0	96.3	96.9	95.8	92.7	88.2	78.9	102.4
8	85.8	93.7	98.0	98.6	97.5	94.4	89.9	80.6	104.2
9	86.5	94.4	98.7	99.3	98.2	95.1	90.6	81.3	104.8
10	86.5	94.4	98.7	99.3	98.2	95.1	90.6	81.3	104.8

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
11	86.5	94.4	98.7	99.3	98.2	95.1	90.6	81.3	104.8
12	86.5	94.4	98.7	99.3	98.2	95.1	90.6	81.3	104.8

Table A10.3.10 ECO100 with a 70 m hub height (dB L_{WA})

Standardised 10 m height wind speed (m/s)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Overall
3	81.2	89.1	93.4	94.0	92.9	89.8	85.3	76.0	99.5
4	81.2	89.1	93.4	94.0	92.9	89.8	85.3	76.0	99.5
5	81.2	89.1	93.4	94.0	92.9	89.8	85.3	76.0	99.5
6	84.2	92.1	96.4	97.0	95.9	92.8	88.3	79.0	102.5
7	87.2	95.1	99.4	100.0	98.9	95.8	91.3	82.0	105.5
8	88.5	96.4	100.7	101.3	100.2	97.1	92.6	83.3	106.8
9	89.0	96.9	101.2	101.8	100.7	97.6	93.1	83.8	107.3
10	89.1	97.0	101.3	101.9	100.8	97.7	93.2	83.9	107.4
11	89.1	97.0	101.3	101.9	100.8	97.7	93.2	83.9	107.4
12	89.1	97.0	101.3	101.9	100.8	97.7	93.2	83.9	107.4