

Annex 7 – Summary of Wind Turbine Noise Source Data

Table A7.1: Sound Power Level Data

Wind Farm	Turbine	Hub height	Uncertainty Included	Reference Wind Speed (ms ⁻¹) Standardised to 10m Height									
				3	4	5	6	7	8	9	10	11	12
Dorenell/ Hill of Towie II	VESTAS-V90 3MW, standard blade	80	2	-	99.9	102.9	106.2	108.1	109	109	109	109	109
Hill of Towie	Siemens SWT 2.3-82, standard blade	80	2	-	92.3	100.5	105.2	106.5	106.5	106.5	106.5	106.5	106.5
Clashindarroch/ Cairnborrow	REPOWER MM82 Blade RE40 2050KW	59	2	89.6	94.5	100.2	104.3	105	105	105	105	105	105

Table A7.2: Octave Band Data

Scheme	Turbine Modelled	Octave Band (Hz)									
		31.5	63	125	250	500	1000	2000	4000	8000	Overall
Dorenell/ Hill of Towie II	VESTAS-V90 3MW, standard blade	85.2	93.9	96.0	99.3	101.6	103.8	102.5	98.7	88.7	109.0
Hill of Towie	Siemens SWT 2.3-82, standard blade	0.0	79.8	89.8	98.5	100.6	100.9	98.3	96.4	90.6	106.5
Clashindarroch/ Cairnborrow	REPOWER MM82 Blade RE40 2050KW	77.7	88.0	93.8	97.1	99.3	99.4	96.1	93.1	77.3	105.0

Annex 8 – Site Specific Noise Limits for Clashindarroch Extension Wind Farm

Proposed Site Specific Noise Limits for Clashindarroch Extension Wind Farm

Noise Assessment Location (NAL)	Share of Limit needed?	Daytime Site Specific Noise Limit (LA90) (Wind Speed (ms-1) as standardised to 10 m height)												Night-time Site Specific Noise Limit (LA90) (Wind Speed (ms-1) as standardised to 10 m height)											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
NAL1 - Wester Braetown	No																								
NAL2 - Easter Braetown	No																								
NAL3 - Backside	No																								
NAL4 - Tighnaird	No																								
NAL5 - Mill of Lynebain	No																								
NAL6 - Belcherrie	Yes	35.2	35.2	35.2	35.2	35.2	33.9	33.3	33.3	33.6	37.1	37.1	37.1	38.2	38.2	38.2	38.2	38.2	36.9	36.3	36.3	36.3	39.1	47.0	47.0
NAL7 - Greentoan	Yes	35.2	35.2	35.2	35.2	35.3	34.0	33.4	33.4	33.7	37.2	37.2	37.2	38.2	38.2	38.2	38.2	38.3	37.0	36.4	36.4	36.4	39.2	47.1	47.1
NAL8 - Succoth	Yes	37.1	37.1	37.1	37.1	37.2	36.2	35.8	35.8	35.8	38.2	38.2	38.2	40.1	40.1	40.1	40.1	40.2	39.2	38.8	38.8	38.8	38.8	38.8	38.8
NAL9 - Easterton	Yes	38.1	38.1	38.1	38.1	38.1	37.4	37.0	37.0	37.0	39.4	39.4	39.4	41.1	41.1	41.1	41.1	41.1	40.4	40.0	40.0	40.0	40.0	40.0	40.0
NAL10 - Oldtown of Corinacy	Yes	39.5	39.5	39.5	39.5	39.5	39.3	38.4	38.4	38.4	41.6	41.6	41.6	42.5	42.5	42.5	42.5	42.5	42.3	42.2	42.2	42.2	42.2	42.2	42.2
NAL11 - Milltown	Yes	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	42.4	42.4	42.4	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
NAL12 - Ardlewie	No																								
NAL13 - Rhinturk	No																								
NAL14 - Ballochford	No																								
NAL15 - Bridgehaugh	No																								
NAL16 - Parkhead Steading	No																								
NAL17 - Earnfold	No																								
NAL18 - Building SE of Greens of Glenbeg	No																								
NAL19 - Chapel Hill	No																								
NAL20 - Building NW of Chapel Hill	No																								
NAL21 - Meikle Gouls	No																								
NAL22 - Tomnaven	Yes	37.8	37.8	37.8	37.8	37.8	37.0	36.7	36.7	39.7	41.7	44.7	47.7	40.8	40.8	40.8	40.8	40.8	40.0	39.7	39.7	39.7	41.7	44.7	46.7
NAL23 - Hillock of Echt	Yes	39.2	39.2	39.2	39.2	39.2	38.9	38.7	38.7	41.7	43.7	46.7	49.7	42.2	42.2	42.2	42.2	42.2	41.9	41.7	41.7	41.7	43.7	46.7	48.7
NAL24 - Pyke	Yes	39.4	39.4	39.4	39.4	39.4	39.1	39.0	39.0	42.0	44.0	47.0	50.0	42.4	42.4	42.4	42.4	42.4	42.1	42.0	42.0	42.0	44.0	47.0	49.0