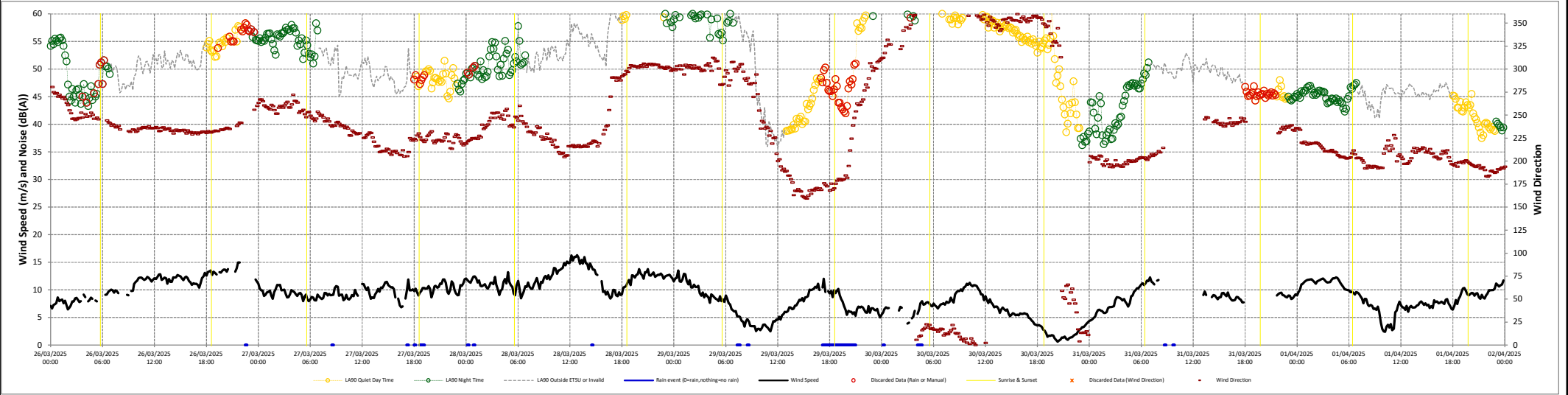
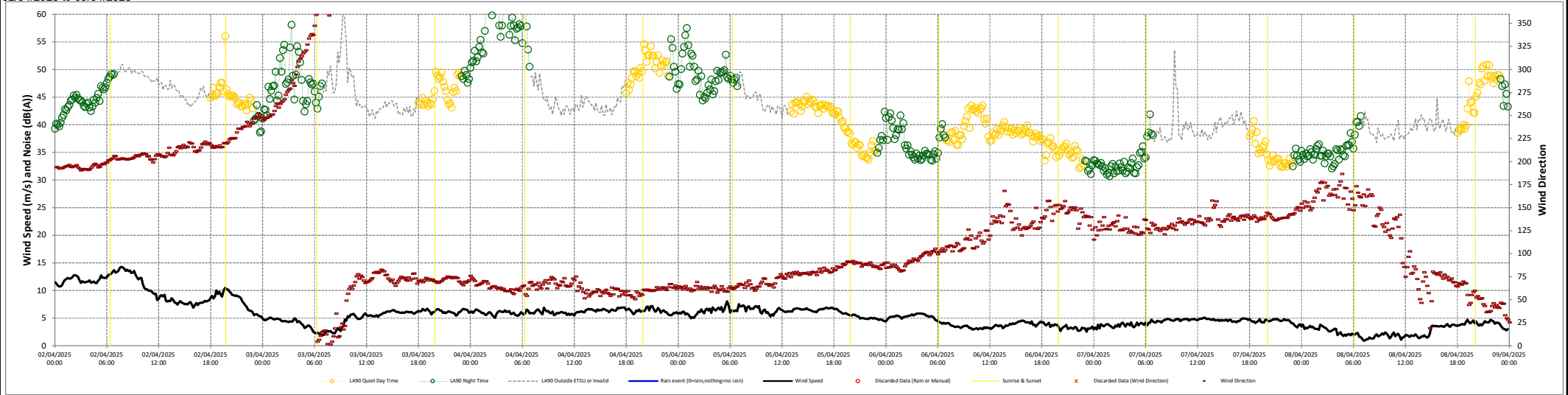


26/03/2025 to 02/04/2025



02/04/2025 to 09/04/2025



Project Neshion Energy Park

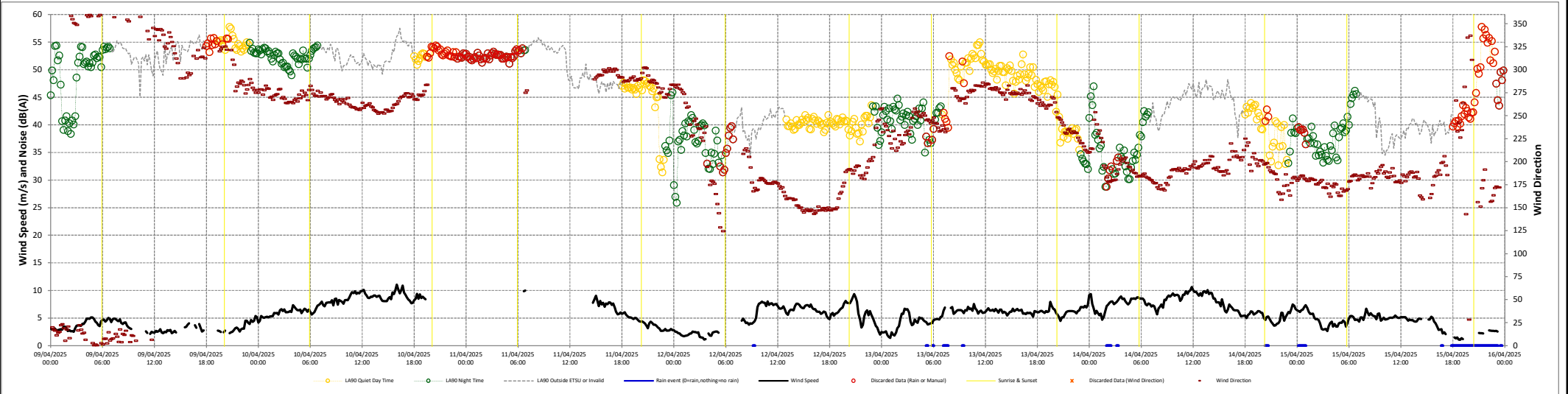
Client Neshion Ltd

Title Time Serie for Garth Farmhouse Page 3 of 5

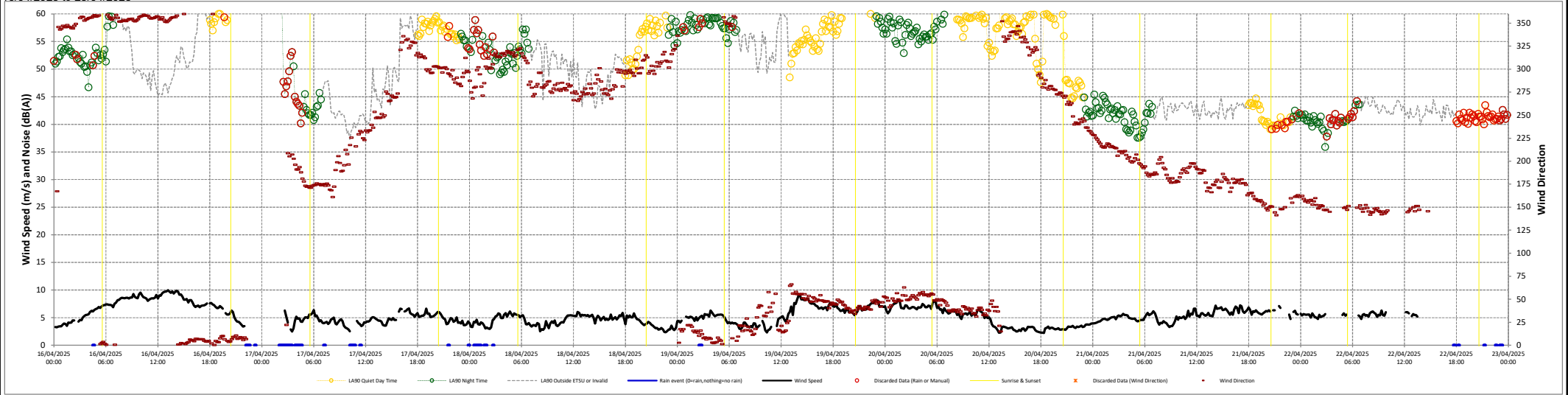
Date 10/03/2026



09/04/2025 to 16/04/2025



16/04/2025 to 23/04/2025



Project Neshion Energy Park

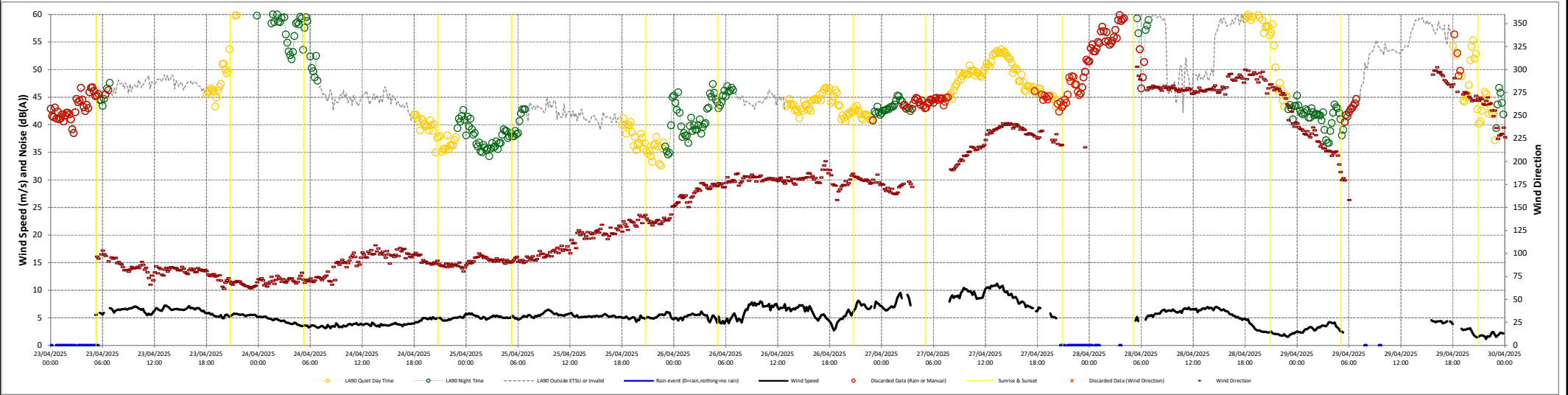
Client Neshion Ltd

Title Time Serie for Garth Farmhouse Page 4 of 5

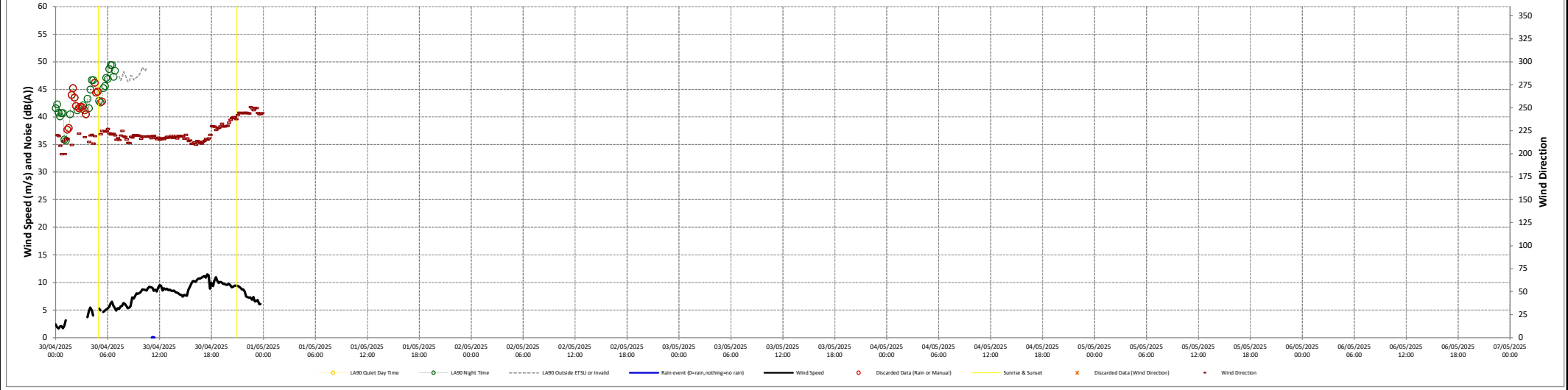
Date 10/03/2026



23/04/2025 to 30/04/2025



30/04/2025 to 07/05/2025



Project	Neshion Energy Park
Client	Neshion Ltd
Title	Time Serie for Garth Farmhouse Page 5 of 5
Date	10/03/2026



Annex 6 – Topographical Corrections/ Turbine Coordinates/ Cumulative Noise Predictions

Topographical (concave ground/ barrier) Noise Prediction Adjustment Table

Notes/Comments:

- Requirement to include a concave ground profile correction of +3dB has been calculated in accordance with section 4.3.9 of the IOA GPG (July 2011)
- A barrier correction of -2dB is included where the landform completely obscures a turbine at the noise assessment location
- Where analysis indicates that both are required the barrier correction take precedence and a correction of -2dB is applied

Wind Farm	SRC_ID	Hub Height (m)	Tip Height (m)	NAL01	NAL02	NAL03	NAL04	NAL05	NAL06	NAL07	NAL08	NAL09	NAL10	NAL11	NAL12
Sullom Voe Terminal Wind Turbines	1	83.50	150.00	-2	-2	0	-2	-2	-2	-2	-2	-2	-2	-2	3
Sullom Voe Terminal Wind Turbines	2	83.50	150.00	-2	-2	0	-2	-2	-2	-2	-2	-2	-2	-2	3
Neshion	3	114.00	200.00	0	0	0	0	0	0	-2	3	0	-2	-2	0
Neshion	4	114.00	200.00	0	-2	0	0	0	0	-2	-2	0	-2	-2	0
Neshion	5	114.00	200.00	0	-2	0	0	0	0	-2	-2	0	-2	-2	0
Neshion	6	114.00	200.00	0	0	0	0	0	0	0	0	0	-2	-2	0
Neshion	7	114.00	200.00	0	0	0	0	0	0	0	0	0	-2	-2	0
Neshion	8	114.00	200.00	0	0	0	0	0	0	0	3	3	-2	-2	0
Neshion	9	114.00	200.00	0	0	0	0	0	0	0	3	3	-2	-2	0
Neshion	10	114.00	200.00	0	0	0	0	0	0	-2	3	0	-2	-2	0

Wind Farm	SRC_ID	Hub Height (m)	Tip Height (m)	NAL13	NAL14	NAL15
Sullom Voe Terminal Wind Turbines	1	83.50	150.00	0	0	0
Sullom Voe Terminal Wind Turbines	2	83.50	150.00	3	3	0
Neshion	3	114.00	200.00	0	0	0
Neshion	4	114.00	200.00	0	0	-2
Neshion	5	114.00	200.00	0	0	-2
Neshion	6	114.00	200.00	0	-2	-2
Neshion	7	114.00	200.00	0	0	-2
Neshion	8	114.00	200.00	0	0	-2
Neshion	9	114.00	200.00	0	0	0
Neshion	10	114.00	200.00	0	0	0

Noise Source Reference Table

SRC_ID	Wind Farm	X	Y	Hub Height (m)	Tip Height (m)
1	Sullom Voe Terminal Wind Turbines	438641	1175915	83.5	150.0
2	Sullom Voe Terminal Wind Turbines	439030	1175497	83.5	150.0
3	Neshion	441180	1176678	114.0	200.0
4	Neshion	441176	1177173	114.0	200.0
5	Neshion	441196	1177668	114.0	200.0
6	Neshion	441600	1178091	114.0	200.0
7	Neshion	441796	1177653	114.0	200.0
8	Neshion	441949	1177082	114.0	200.0
9	Neshion	442366	1176774	114.0	200.0
10	Neshion	441834	1176508	114.0	200.0

Table A6.3 - Likely Effects Calculations

Location		Wind Speed (ms-1) as standardised to 10m height											
		1	2	3	4	5	6	7	8	9	10	11	12
NAL1 - The Brough (NAL1)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	27.8	31.6	35.2	36.4	36.4	36.4	36.4	36.4	36.4
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	2.9	4.1	9.6	13.8	14.4	14.4	14.4	14.4	14.4	14.4
	Difference	-	-	-	23.7	22	21.4	22	22	22	22	22	22
NAL2 - Norden (NAL2)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	28.1	32	35.5	36.7	36.7	36.7	36.7	36.7	36.7
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	3.3	4.5	10	14.2	14.8	14.8	14.8	14.8	14.8	14.8
	Difference	-	-	-	23.6	22	21.3	21.9	21.9	21.9	21.9	21.9	21.9
NAL3 - Whitehouse (NAL3)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	29.5	33.4	36.9	38.1	38.1	38.1	38.1	38.1	38.1
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	6.2	7.4	12.9	17.1	17.7	17.7	17.7	17.7	17.7	17.7
	Difference	-	-	-	22.1	20.5	19.8	20.4	20.4	20.4	20.4	20.4	20.4
NAL4 - Lighthouse Cottage (NAL4)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	28	31.8	35.4	36.6	36.6	36.6	36.6	36.6	36.6
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	4.1	5.3	10.8	15	15.6	15.6	15.6	15.6	15.6	15.6
	Difference	-	-	-	22.7	21	20.4	21	21	21	21	21	21
NAL5 - NAL05 (NAL5)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	20.7	24.5	28.1	29.3	29.3	29.3	29.3	29.3	29.3
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	0.6	1.8	7.3	11.5	12.1	12.1	12.1	12.1	12.1	12.1
	Difference	-	-	-	18.9	17.2	16.6	17.2	17.2	17.2	17.2	17.2	17.2
NAL6 - Bankhead Straits (NAL6)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	20.4	24.2	27.7	29	29	29	29	29	29
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	0.5	1.7	7.2	11.4	12	12	12	12	12	12
	Difference	-	-	-	18.7	17	16.3	17	17	17	17	17	17
NAL7 - NAL07 (NAL7)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	19.2	23.1	26.6	27.8	27.8	27.8	27.8	27.8	27.8
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	0.4	1.6	7.1	11.3	11.9	11.9	11.9	11.9	11.9	11.9
	Difference	-	-	-	17.6	16	15.3	15.9	15.9	15.9	15.9	15.9	15.9
NAL8 - 15 Maidenfield (NAL8)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	22	25.9	29.4	30.6	30.6	30.6	30.6	30.6	30.6
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	0.6	1.8	7.3	11.5	12.1	12.1	12.1	12.1	12.1	12.1
	Difference	-	-	-	20.2	18.6	17.9	18.5	18.5	18.5	18.5	18.5	18.5
NAL9 - NAL09 (NAL9)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	20.7	24.6	28.1	29.3	29.3	29.3	29.3	29.3	29.3
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	0.4	1.6	7.1	11.3	11.9	11.9	11.9	11.9	11.9	11.9
	Difference	-	-	-	19.1	17.5	16.8	17.4	17.4	17.4	17.4	17.4	17.4
NAL10 - 10 Leaside (NAL10)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	17.2	21	24.5	25.8	25.8	25.8	25.8	25.8	25.8
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	1.2	2.4	7.9	12.1	12.7	12.7	12.7	12.7	12.7	12.7
	Difference	-	-	-	14.8	13.1	12.4	13.1	13.1	13.1	13.1	13.1	13.1
NAL11 - NAL11 (NAL11)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	17.6	21.4	25	26.2	26.2	26.2	26.2	26.2	26.2
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	2.1	3.4	8.9	13	13.6	13.6	13.6	13.6	13.6	13.6
	Difference	-	-	-	14.2	12.5	12	12.6	12.6	12.6	12.6	12.6	12.6
Moorfield (NAL12)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	17.7	21.5	25.1	26.3	26.3	26.3	26.3	26.3	26.3
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	8.9	10.1	15.6	19.8	20.4	20.4	20.4	20.4	20.4	20.4

NAL12 -	Difference	-	-	-	7.6	5.9	5.3	5.9	5.9	5.9	5.9	5.9	5.9
NAL13 - Laxobigging (NAL13)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	19.4	23.2	26.8	28	28	28	28	28	28
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	11.5	12.7	18.2	22.4	23	23	23	23	23	23
	Difference	-	-	-	6.7	5	4.4	5	5	5	5	5	5
NAL14 - Millburn (NAL14)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	20.8	24.6	28.2	29.4	29.4	29.4	29.4	29.4	29.4
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	13.6	14.8	20.3	24.5	25.1	25.1	25.1	25.1	25.1	25.1
	Difference	-	-	-	6	4.3	3.7	4.3	4.3	4.3	4.3	4.3	4.3
NAL15 - Garth Farmhouse (NAL15)	Predicted Wind Turbine Noise LA90 Proposed Development	-	-	-	22.3	26.2	29.7	30.9	30.9	30.9	30.9	30.9	30.9
	Predicted Wind Turbine Noise LA90 Other Scheme	-	-	15.8	17	22.5	26.7	27.3	27.3	27.3	27.3	27.3	27.3
	Difference	-	-	-	5.3	3.7	3	3.6	3.6	3.6	3.6	3.6	3.6

Annex 7 – Summary of Wind Turbine Noise Source Data

Wind Turbine Noise Data Assumptions

Sound Power Level Data

Wind Farm	Turbine	Hub height (m)	Added Uncertainty	Reference Wind Speed (ms ⁻¹) Standardised to 10m Height									
				3	4	5	6	7	8	9	10	11	12
Sullom Voe Oil Terminal Turbines	Nordex N133 4.8 MW Without Serrated Trailing Edge Blades	83.5	2	96.5	97.7	103.2	107.4	108.0	108.0	108.0	108.0	108.0	108.0
Neshion Energy Park	Vestas V172 7.2 MW with Serrated Trailing Edge Blades	114	2	Under NDA. Data available upon request. Maximum overall Sound Power Level of 108 dB									

Octave Band Data

Wind Farm	Turbine	Reference Wind Speed	Octave Band (Hz)								
			63	125	250	500	1000	2000	4000	8000	Overall
Sullom Voe Oil Terminal Turbines	Nordex N133 4.8 MW Without Serrated Trailing Edge Blades	7	91.8	98.8	103.4	102.4	103.0	101.9	100.3	87.5	109.8
Neshion Energy Park	Vestas V172 7.2 MW with Serrated Trailing Edge Blades	Under NDA. Data available upon request. Maximum overall Sound Power Level of 108 dB									