

Appendix 14.1 Meteorological Data

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Sunshine Hours

Table 1 below summarises raw data received from the historical weather station data for Lerwick, and held by the UK Met Office (2019).

Table 1 – Mean Monthly Sunshine from 1981-2010 at Lerwick

Month	Number of Days in Month	Average Sun Hours /month	Average Sun Hours /day
January	31	27.2	0.88
February	28	55.2	1.97
March	31	94.1	3.04
April	30	131.8	4.39
May	31	181	5.84
June	30	146.2	4.87
July	31	124.4	4.01
August	31	127.9	4.13
September	30	101.3	3.38
October	31	68.8	2.22
November	30	33.8	1.13
December	31	18.1	0.58

Wind Distribution

Table 2 below outlines the wind parameters used within the WindPro model for the Proposed Development. It adopts a 12 degree sector with 7,446 hours of wind per year (equivalent to the development being operational for 85 % of the year). Wind distribution for the site is based on generic data for wind distribution in Scotland.

Table 2 – Wind Distribution

Direction	Wind Distribution	Hours of Wind / year	Direction	Wind Distribution	Hours of Wind / year
N	2.65 %	197.3	S	13.22 %	984.4
NNE	3.88 %	288.9	SSW	15.43 %	1148.9
NE	5.38 %	400.6	SW	9.63 %	717.0
ENE	3.12 %	232.3	WSW	12.58 %	936.7
E	2.88 %	214.4	W	9.31 %	693.2
ESE	2.62 %	195.1	WNW	6.03 %	449.0

Direction	Wind Distribution	Hours of Wind / year	Direction	Wind Distribution	Hours of Wind / year
SE	3.17 %	236.0	NW	2.75 %	204.8
SSE	4.42 %	329.1	NNW	2.93 %	218.2
Totals			100.0%		7446.0