



Dean Moor Solar Farm

Environmental Statement: Appendix 9.8 – Minimum Winter Air Temperature Anomaly on behalf of **FVS Dean Moor Limited**

March 2025
Prepared by: Stantec UK Ltd
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DEAN MOOR SOLAR FARM
ENVIRONMENTAL STATEMENT
APPENDIX 9.8 – MINIMUM WINTER AIR TEMPERATURE ANOMALY
PLANNING INSPECTORATE REFERENCE EN010155
PREPARED ON BEHALF OF FVS DEAN MOOR LIMITED

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations
2009, Regulation 5(2)(a)

Project Ref:	EN010155/ES/Appendix 9.8: Minimum Winter Air Temperature Anomaly
Status	Final
Issue/ Rev:	1
Date:	March 2025

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1 Minimum Winter Air Temperature Anomaly Data

- Area: 312500.0512500.0
- Baseline: 1981-2000
- Data Source: land probabilistic projections
- Data type: cdf
- Scenario: RCP 8.5
- Show labels: TRUE
- Software version: WPS-2.10.0-DP-2.10.0-CV-1.0.10
- Spatial representation: 25km grid
- Temporal average type: seasonal
- Time period: December, January, February
- Time slice type: 1-year time slices
- Variable: Minimum air temperature anomaly at 1.5m (°C)
- Year maximum: 2077
- Year minimum: 2024

Date	Minimum air temperature anomaly at 1.5m (°C) (5 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (10 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (25 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (50 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (75 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (90 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (95 th Percentile)
01/01/2024	-1.3582549	-0.90127254	-0.1325107	0.7344663	1.59815	2.3971174	2.886036
01/01/2025	-1.3418345	-0.8833403	-0.11135192	0.7586218	1.6258992	2.4287508	2.919769
01/01/2026	-1.3253081	-0.8653191	-0.090177044	0.78275263	1.6538073	2.4607193	2.9539368
01/01/2027	-1.3086493	-0.8471671	-0.068938695	0.80692685	1.6819717	2.4931445	2.988693
01/01/2028	-1.2918272	-0.8288371	-0.047580652	0.8312236	1.7104994	2.5261564	3.0242019
01/01/2029	-1.2748079	-0.8102786	-0.026040398	0.8557303	1.739504	2.5598924	3.060633
01/01/2030	-1.2575573	-0.7914407	-0.004251928	0.88053906	1.769101	2.5944896	3.0981574
01/01/2031	-1.2400424	-0.7722747	0.017851368	0.9057438	1.7994051	2.6300833	3.136941
01/01/2032	-1.222234	-0.75273645	0.040333837	0.9314364	1.8305249	2.6668003	3.1771395

Date	Minimum air temperature anomaly at 1.5m (°C) (5 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (10 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (25 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (50 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (75 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (90 th Percentile)	Minimum air temperature anomaly at 1.5m (°C) (95 th Percentile)
01/01/2033	-1.2041074	-0.73278874	0.06325485	0.957704	1.8625609	2.704756	3.2188938
01/01/2034	-1.1856451	-0.7124032	0.08666639	0.9846256	1.8956003	2.74405	3.2623243
01/01/2035	-1.1668367	-0.6915617	0.11061108	1.0122697	1.9297161	2.784763	3.3075285
01/01/2036	-1.1476805	-0.6702571	0.13512085	1.0406927	1.9649638	2.8269548	3.3545763
01/01/2037	-1.1281823	-0.64849347	0.16021629	1.0699375	2.0013804	2.870663	3.4035106
01/01/2038	-1.1083555	-0.62628496	0.18590672	1.100033	2.038984	2.9159014	3.4543443
01/01/2039	-1.0882195	-0.6036548	0.21219106	1.1309949	2.0777752	2.9626625	3.5070627
01/01/2040	-1.0677983	-0.58063316	0.23905912	1.162826	2.1177363	3.0109172	3.5616238
01/01/2041	-1.0471177	-0.55725497	0.26649332	1.1955177	2.158835	3.0606174	3.6179621
01/01/2042	-1.0262051	-0.53355736	0.2944705	1.2290521	2.2010243	3.1116986	3.6759899
01/01/2043	-1.0050867	-0.50957805	0.32296354	1.2634027	2.2442472	3.164082	3.7356014
01/01/2044	-0.98378694	-0.4853532	0.35194305	1.2985368	2.2884374	3.217678	3.7966776
01/01/2045	-0.9623283	-0.46091625	0.3813783	1.3344163	2.3335218	3.2723894	3.859089
01/01/2046	-0.9407305	-0.43629718	0.41123816	1.3709995	2.3794239	3.3281143	3.9227006
01/01/2047	-0.9190114	-0.41152218	0.44149154	1.4082415	2.4260657	3.38475	3.987378
01/01/2048	-0.8971878	-0.38661408	0.4721073	1.4460962	2.4733691	3.4421957	4.0529885
01/01/2049	-0.87527645	-0.361593	0.5030541	1.4845157	2.521259	3.5003567	4.11941
01/01/2050	-0.85329545	-0.33647746	0.53429973	1.5234511	2.569665	3.5591462	4.1865315
01/01/2051	-0.8312657	-0.31128567	0.565811	1.5628532	2.6185217	3.6184888	4.254258
01/01/2052	-0.8092121	-0.28603703	0.5975523	1.6026725	2.6677713	3.6783233	4.322514
01/01/2053	-0.7871649	-0.2607533	0.62948596	1.6428587	2.7173638	3.7386026	4.3912444
01/01/2054	-0.7651604	-0.23546	0.66157126	1.6833624	2.7672584	3.7992969	4.460417
01/01/2055	-0.74324125	-0.21018714	0.69376475	1.7241336	2.8174229	3.8603928	4.530022

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01/01/2056	-0.721457	-0.18496993	0.7260201	1.7651238	2.8678353	3.9218946	4.600073
01/01/2057	-0.69986314	-0.15984897	0.75828886	1.8062855	2.918483	3.9838226	4.6706023
01/01/2058	-0.6785206	-0.1348698	0.79052144	1.8475738	2.9693635	4.046212	4.741664
01/01/2059	-0.6574942	-0.110082045	0.8226684	1.8889472	3.020484	4.109113	4.813325
01/01/2060	-0.63685054	-0.08553795	0.85468197	1.9303693	3.071861	4.172586	4.885667
01/01/2061	-0.6166557	-0.06129038	0.8865184	1.9718099	3.1235209	4.236701	4.9587784
01/01/2062	-0.59697235	-0.03739043	0.91813993	2.0132465	3.1754982	4.301533	5.032752
01/01/2063	-0.57785684	-0.013884712	0.94951695	2.0546665	3.227836	4.367161	5.1076794
01/01/2064	-0.5593562	0.009187412	0.9806301	2.0960677	3.2805839	4.4336615	5.1836443
01/01/2065	-0.5415053	0.03179658	1.0114721	2.1374595	3.3337977	4.5011063	5.2607217
01/01/2066	-0.5243241	0.053925905	1.0420496	2.1788638	3.3875375	4.569559	5.3389673
01/01/2067	-0.50781614	0.07557304	1.0723834	2.2203155	3.441866	4.6390715	5.4184203
01/01/2068	-0.4919668	0.09675171	1.1025095	2.2618613	3.4968462	4.70968	5.499094
01/01/2069	-0.47674295	0.11749253	1.1324792	2.3035605	3.5525415	4.7814045	5.580978
01/01/2070	-0.46209303	0.13784322	1.1623576	2.3454828	3.609012	4.8542457	5.664036
01/01/2071	-0.44794792	0.15786818	1.1922233	2.3877077	3.6663136	4.928187	5.748207
01/01/2072	-0.43422267	0.17764734	1.2221665	2.4303226	3.724498	5.003192	5.833407
01/01/2073	-0.42081845	0.1972746	1.2522874	2.4734209	3.7836099	5.0792093	5.9195323
01/01/2074	-0.40762508	0.2168558	1.282693	2.5170999	3.8436875	5.1561728	6.0064654
01/01/2075	-0.39452413	0.23650602	1.3134961	2.5614586	3.9047618	5.234004	6.094078
01/01/2076	-0.38139206	0.25634667	1.344811	2.6065953	3.9668567	5.312619	6.1822386
01/01/2077	-0.36810413	0.27650198	1.3767513	2.6526048	4.0299883	5.3919287	6.270817