



Dean Moor Solar Farm

Environmental Statement: Appendix 9.9 – Average Winter Precipitation Rate Anomaly on behalf of **FVS Dean Moor Limited**

March 2025
Prepared by: Stantec UK Ltd
PINS Ref: EN010155
Document Ref: 6.3
Revision: 1



Firma Energy

 **ib vogt**

DEAN MOOR SOLAR FARM
ENVIRONMENTAL STATEMENT
APPENDIX 9.9 – AVERAGE WINTER PRECIPITATION RATE 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 9.9: Average Winter Precipitation Rate Anomaly
Status	Final
Issue/ Rev:	1
Date:	March 2025

Contents

1	Average Winter Precipitation Anomaly Data	1
---	---	---

1 Average Winter Precipitation 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: Precipitation rate anomaly (%)
- Year maximum: 2077
- Year minimum: 2024

Date	Precipitation rate anomaly (%) (5 th Percentile)	Precipitation rate anomaly (%) (10 th Percentile)	Precipitation rate anomaly (%) (25 th Percentile)	Precipitation rate anomaly (%) (50 th Percentile)	Precipitation rate anomaly (%) (75 th Percentile)	Precipitation rate anomaly (%) (90 th Percentile)	Precipitation rate anomaly (%) (95 th Percentile)
16/01/2024	-36.308445	-27.18952	-11.406226	6.5672054	26.330164	45.88871	57.045307
16/01/2025	-36.20797	-27.116486	-11.35094	6.75231	26.64782	46.239864	57.329163
16/01/2026	-36.09071	-27.032804	-11.289486	6.942759	26.963799	46.571404	57.597916
16/01/2027	-35.958252	-26.93904	-11.220871	7.139888	27.279379	46.88667	57.857132
16/01/2028	-35.81253	-26.83601	-11.14414	7.3450217	27.596022	47.18961	58.112843
16/01/2029	-35.655773	-26.72475	-11.058398	7.5594335	27.91531	47.484596	58.37137
16/01/2030	-35.490414	-26.606464	-10.962838	7.7842903	28.238867	47.776283	58.639072
16/01/2031	-35.31903	-26.482489	-10.856767	8.020602	28.56828	48.069393	58.922153
16/01/2032	-35.14424	-26.354235	-10.739633	8.269172	28.905008	48.368546	59.226414

Date	Precipitation rate anomaly (%) (5 th Percentile)	Precipitation rate anomaly (%) (10 th Percentile)	Precipitation rate anomaly (%) (25 th Percentile)	Precipitation rate anomaly (%) (50 th Percentile)	Precipitation rate anomaly (%) (75 th Percentile)	Precipitation rate anomaly (%) (90 th Percentile)	Precipitation rate anomaly (%) (95 th Percentile)
16/01/2033	-34.968643	-26.22314	-10.611046	8.530548	29.250305	48.67806	59.557034
16/01/2034	-34.794727	-26.09063	-10.470806	8.804983	29.605135	49.00179	59.918385
16/01/2035	-34.62484	-25.95807	-10.318915	9.092402	29.97011	49.342964	60.31383
16/01/2036	-34.461117	-25.82674	-10.15559	9.392391	30.34545	49.704086	60.74562
16/01/2037	-34.305458	-25.697788	-9.981264	9.704189	30.730953	50.086826	61.214787
16/01/2038	-34.159473	-25.572224	-9.796577	10.02672	31.12602	50.492027	61.72112
16/01/2039	-34.024487	-25.450882	-9.60235	10.358633	31.529692	50.91969	62.263203
16/01/2040	-33.9015	-25.3344	-9.399555	10.698364	31.94071	51.36906	62.83851
16/01/2041	-33.79118	-25.223204	-9.189261	11.044214	32.35762	51.838722	63.443535
16/01/2042	-33.69385	-25.117485	-8.9725895	11.394439	32.778866	52.326717	64.07399
16/01/2043	-33.609474	-25.017185	-8.750646	11.747332	33.202896	52.83073	64.725044
16/01/2044	-33.53767	-24.921984	-8.524469	12.101318	33.628277	53.34822	65.39154
16/01/2045	-33.477688	-24.831305	-8.294972	12.455029	34.05379	53.8766	66.06827
16/01/2046	-33.42845	-24.744307	-8.062892	12.807367	34.4785	54.413376	66.750206
16/01/2047	-33.388565	-24.659906	-7.828748	13.157564	34.90182	54.956287	67.43274
16/01/2048	-33.356346	-24.576792	-7.592818	13.505204	35.323547	55.50341	68.111885
16/01/2049	-33.329865	-24.493452	-7.3551106	13.850247	35.74386	56.05323	68.784386
16/01/2050	-33.306973	-24.4082	-7.115366	14.193017	36.163315	56.60467	69.44786
16/01/2051	-33.28536	-24.31921	-6.8730583	14.534185	36.58281	57.157116	70.10084
16/01/2052	-33.26258	-24.224554	-6.6274114	14.874736	37.00352	57.710396	70.74277
16/01/2053	-33.2361	-24.122229	-6.3774247	15.215918	37.426846	58.264748	71.373985
16/01/2054	-33.203354	-24.010204	-6.1219134	15.559181	37.854332	58.820766	71.99565
16/01/2055	-33.161766	-23.886456	-5.8595533	15.906118	38.28761	59.37936	72.60965
16/01/2056	-33.10883	-23.749018	-5.588939	16.258385	38.72831	59.941685	73.218506

Date	Precipitation rate anomaly (%) (5 th Percentile)	Precipitation rate anomaly (%) (10 th Percentile)	Precipitation rate anomaly (%) (25 th Percentile)	Precipitation rate anomaly (%) (50 th Percentile)	Precipitation rate anomaly (%) (75 th Percentile)	Precipitation rate anomaly (%) (90 th Percentile)	Precipitation rate anomaly (%) (95 th Percentile)
16/01/2057	-33.042145	-23.596024	-5.308643	16.617632	39.17802	60.509083	73.82524
16/01/2058	-32.95948	-23.425764	-5.0172815	16.98544	39.638218	61.083054	74.43326
16/01/2059	-32.858837	-23.236732	-4.713577	17.363243	40.110245	61.665188	75.04622
16/01/2060	-32.7385	-23.027683	-4.3964176	17.752306	40.595276	62.257137	75.66793
16/01/2061	-32.597103	-22.797676	-4.0649085	18.153667	41.094307	62.860588	76.30222
16/01/2062	-32.433704	-22.546124	-3.7184172	18.568127	41.60818	63.47724	76.952835
16/01/2063	-32.24781	-22.272846	-3.356606	18.996246	42.137573	64.108765	77.62334
16/01/2064	-32.03945	-21.978102	-2.9794576	19.438349	42.68304	64.75682	78.317055
16/01/2065	-31.809216	-21.662619	-2.5872889	19.894539	43.245018	65.423	79.03698
16/01/2066	-31.558273	-21.327621	-2.1807542	20.364725	43.823883	66.10883	79.78572
16/01/2067	-31.28839	-20.974838	-1.7608398	20.84865	44.419945	66.81579	80.565506
16/01/2068	-31.001926	-20.606485	-1.3288499	21.34591	45.03348	67.54524	81.378136
16/01/2069	-30.701803	-20.225258	-0.88638186	21.855988	45.66476	68.29847	82.225
16/01/2070	-30.391457	-19.834278	-0.4352945	22.378275	46.314026	69.07666	83.10709
16/01/2071	-30.074766	-19.437033	0.02233433	22.912098	46.981537	69.88093	84.02507
16/01/2072	-29.755968	-19.037312	0.48425904	23.456736	47.667545	70.71226	84.97927
16/01/2073	-29.439545	-18.639093	0.94812673	24.011448	48.372314	71.57159	85.9698
16/01/2074	-29.130106	-18.246458	1.4115444	24.575497	49.09611	72.45973	86.99654
16/01/2075	-28.832258	-17.863455	1.8721498	25.148169	49.839188	73.37743	88.05919
16/01/2076	-28.550468	-17.493998	2.327682	25.728794	50.601784	74.325294	89.15732
16/01/2077	-28.28893	-17.141743	2.776049	26.316761	51.384094	75.30378	90.29034