



Parc Ynni Calon y Gwynt

ENVIRONMENTAL STATEMENT

Appendix 11L: Operational Modes





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1 OPERATIONAL MODES

1.1 PARC YNNI CALON Y GWYNT OPERATIONAL MODES

1.1.1. **Table 11L 1 - Table 11L 11** below detail the assumed operational scheme for the Parc Ynni Calon y Gwynt turbines.

Where:

- 1: Mode 1a – 6700 kW
- 2: Mode 2a – 6595 kW
- 4: Mode 4a – 6290 kW
- 6: Mode 6a – 5990 kW
- 8: Mode 8a – 5740 kW
- 9: Mode 9a – 5190 kW
- 10: Mode 10a – 5110 kW

Table 11L 1 – Operational Modes, T1

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	10	10	10	9	6	1	1
45	1	1	1	9	10	10	6	4	1	1
90	1	1	1	6	8	8	1	1	1	1
135	1	1	1	1	2	4	1	1	1	1
180	1	1	1	1	4	4	1	1	1	1
225	1	1	1	6	8	8	4	4	1	1
270	1	1	1	9	10	10	8	6	1	1
315	1	1	1	10	10	10	9	1	1	1

Table 11L 2 – Operational Modes, T2

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	10	10	10	8	6	1	1
45	1	1	1	9	10	10	6	4	1	1
90	1	1	1	4	6	6	4	2	1	1

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
135	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	4	4	4	4	1	1
225	1	1	1	4	6	6	4	6	1	1
270	1	1	1	9	10	10	8	6	1	1
315	1	1	1	10	10	10	8	8	1	1

Table 11L 3 – Operational Modes, T3

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	9	9	9	4	2	1	1
45	1	1	1	1	4	6	1	1	1	1
90	1	1	1	1	1	1	1	1	1	1
135	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1
225	1	1	1	1	1	1	1	1	1	1
270	1	1	1	6	8	8	1	1	1	1
315	1	1	1	8	9	9	4	2	1	1

Table 11L 4 – Operational Modes, T4

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	8	9	9	2	1	1	1
45	1	1	1	1	4	4	1	1	1	1
90	1	1	1	1	1	1	1	1	1	1
135	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1
225	1	1	1	1	4	4	1	1	1	1

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
270	1	1	1	6	8	8	1	1	1	1
315	1	1	1	8	9	9	1	1	1	1

Table 11L 5 – Operational Modes, T5

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	1	4	6	1	1	1	1
45	1	1	1	1	1	1	1	1	1	1
90	1	1	1	1	1	1	1	1	1	1
135	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1
225	1	1	1	1	1	1	1	1	1	1
270	1	1	1	1	1	1	1	1	1	1
315	1	1	1	1	4	4	1	1	1	1

Table 11L 6 – Operational Modes, T6

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	1	1	1	1	1	1	1
45	1	1	1	1	1	1	1	1	1	1
90	1	1	1	1	2	2	2	1	1	1
135	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1
225	1	1	1	1	1	1	1	1	1	1
270	1	1	1	1	1	1	1	1	1	1
315	1	1	1	1	1	1	1	1	1	1

Table 11L 7 – Operational Modes, T7

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	1	1	1	1	1	1	1
45	1	1	1	1	1	1	1	1	1	1
90	1	1	1	8	8	8	8	1	1	1
135	1	1	1	6	8	8	6	1	1	1
180	1	1	1	6	6	6	6	1	1	1
225	1	1	1	1	1	1	1	1	1	1
270	1	1	1	1	1	1	1	1	1	1
315	1	1	1	1	1	1	1	1	1	1

Table 11L 8 – Operational Modes, T8

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	1	1	1	1	1	1	1
45	1	1	1	1	1	1	1	1	1	1
90	1	1	1	4	6	6	4	1	1	1
135	1	1	1	1	4	4	1	1	1	1
180	1	1	1	1	2	2	2	1	1	1
225	1	1	1	1	4	4	1	1	1	1
270	1	1	1	1	1	1	1	1	1	1
315	1	1	1	1	1	1	1	1	1	1

Table 11L 9 – Operational Modes, T9

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	1	4	4	1	1	1	1
45	1	1	1	1	1	1	1	1	1	1

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
90	1	1	1	1	1	1	1	1	1	1
135	1	1	1	2	2	2	2	1	1	1
180	1	1	1	2	8	8	1	1	1	1
225	1	1	1	1	9	9	6	1	1	1
270	1	1	1	1	1	1	1	1	1	1
315	1	1	1	1	1	1	1	1	1	1

Table 11L 10 – Operational Modes, T10

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	1	1	1	1	1	1	1
45	1	1	1	1	1	1	1	1	1	1
90	1	1	1	2	4	4	2	1	1	1
135	1	1	1	8	9	9	8	1	1	1
180	1	1	1	9	6	6	4	1	1	1
225	1	1	1	8	10	10	8	1	1	1
270	1	1	1	2	6	6	6	1	1	1
315	1	1	1	1	1	1	1	1	1	1

Table 11L 11 – Operational Modes, T11

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
0	1	1	1	4	6	6	1	1	1	1
45	1	1	1	1	4	4	1	1	1	1
90	1	1	1	1	1	1	1	1	1	1
135	1	1	1	4	4	4	4	1	1	1
180	1	1	1	4	10	10	9	1	1	1

Wind Direction Sector (degrees)	Standardised 10m Wind Speed (m/s)									
	3	4	5	6	7	8	9	10	11	12
225	1	1	1	6	10	10	10	1	1	1
270	1	1	1	1	1	1	1	1	1	1
315	1	1	1	2	4	6	1	1	1	1



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