



Parc Ynni Calon y Gwynt

ENVIRONMENTAL STATEMENT

Appendix 13A: Shadow Flicker Modelling Results





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QUALITY CONTROL

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1 SHADOW FLICKER MODELLING RESULTS

Table 13A-1 - Shadow Flicker Modelling Results

Receptor ID	Month	WTG Producing Effect	Duration (hours)	Average Duration (minutes)	Earliest Date	Latest Date	Time of Day of Impact (earliest)	Time of Day of Impact (latest)	Overall Hours of Shadow Flicker at Receptor	Maximum Duration of Shadow Flicker Event (minutes)	Magnitude of Change	Significance (pre-mitigation)
I	May	T5	2.58	17	23-May	31-May	06:04	06:26	22.85	27	Low	Minor (Not Significant)
I	June	T5	12.85	26	01-Jun	30-Jun	06:03	06:34				
I	July	T5	7.42	21	01-Jul	21-Jul	06:08	06:35				
N	Jan	T11	17.15	33	01-Jan	31-Jan	14:52	15:35	59.60	40	Medium	Moderate (Significant)
N	Feb	T11	2.32	23	01-Feb	06-Feb	15:02	15:32				
N	Feb	T9	2.53	13	17-Feb	28-Feb	16:21	16:42				
N	Mar	T9	0.13	8	01-Mar	01-Mar	16:29	16:37				
N	Mar	T10	1.25	11	25-Mar	31-Mar	17:23	18:40				
N	Apr	T10	3.50	21	01-Apr	10-Apr	18:20	18:47				
N	Sep	T10	4.80	17	02-Sep	18-Sep	18:12	18:42				
N	Oct	T9	2.68	12	13-Oct	25-Oct	15:53	17:15				
N	Nov	T11	14.73	34	05-Nov	30-Nov	14:30	15:11				
N	Dec	T11	10.50	20	01-Dec	31-Dec	14:35	15:12				
V	Apr	T5	5.17	18	13-Apr	29-Apr	19:22	19:47	61.32	47	Medium	Moderate (Significant)
V	May	T3	9.45	33	15-May	31-May	20:02	20:45				
V	Jun	T3	23.23	46	01-Jun	30-Jun	20:02	20:54				
V	Jul	T3	18.27	38	01-Jul	29-Jul	20:07	20:54				
V	Aug	T5	5.20	18	14-Aug	30-Aug	19:27	19:51				
AD	Jan	T5	3.25	20	22-Jan	31-Jan	08:46	09:13	87.23	52	Medium	Moderate (Significant)
AD	Feb	T5	5.37	23	01-Feb	14-Feb	08:46	09:15				
AD	Feb	T6	8.88	30	11-Feb	28-Feb	08:06	08:43				
AD	Mar	T6	2.38	24	01-Mar	06-Mar	08:08	08:39				
AD	Mar	T7	4.68	31	23-Mar	31-Mar	06:36	08:14				



Receptor ID	Month	WTG Producing Effect	Duration (hours)	Average Duration (minutes)	Earliest Date	Latest Date	Time of Day of Impact (earliest)	Time of Day of Impact (latest)	Overall Hours of Shadow Flicker at Receptor	Maximum Duration of Shadow Flicker Event (minutes)	Magnitude of Change	Significance (pre-mitigation)
AD	Apr	T7	13.27	38	01-Apr	21-Apr	07:27	08:15				
AD	Apr	T8	5.52	18	12-Apr	29-Apr	06:53	07:21				
AD	Aug	T8	5.55	18	14-Aug	31-Aug	06:58	07:25				
AD	Aug	T7	5.20	31	22-Aug	31-Aug	07:28	08:10				
AD	Sep	T7	12.98	39	01-Sep	20-Sep	07:23	08:10				
AD	Oct	T6	11.45	27	07-Oct	31-Oct	07:40	09:14				
AD	Oct	T5	1.00	15	28-Oct	31-Oct	08:20	08:41				
AD	Nov	T5	7.70	23	01-Nov	20-Nov	08:17	08:45				



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