

RECEIVED: 07/05/2024



APPENDIX 5-4

COMPARATIVE SHADOW FLICKER REPORT

House ID	ITM Coordinates (Easting)	ITM Coordinates (Northing)	Description	Participating Landowner	Distance to Nearest Turbine (metres)	Nearest Proposed Turbine No.	Max. Daily Shadow Flicker: Pre-Mitigation (hrs:min:sec)			Max. Annual Shadow Flicker Adjusted for Average Regional Sunshine (hrs:min:sec)			Max. Daily Shadow Flicker: Pre-Mitigation (hrs:min:sec)			Max. Annual Shadow Flicker Adjusted for Average Regional Sunshine (hrs:min:sec)		
							Lowest Hub (102.5m) & Longest Blade (77.5m)	Hub (105m) & Blade (74.5m)	Highest Hub (105m) & Shortest Blade (77.5m)	Lowest Hub (102.5m) & Longest Blade (77.5m)	Hub (105m) & Blade (74.5m)	Highest Hub (105m) & Shortest Blade (77.5m)	Lowest Hub (102.5m) & Longest Blade (77.5m)	Hub (105m) & Blade (74.5m)	Highest Hub (105m) & Shortest Blade (77.5m)	Lowest Hub (102.5m) & Longest Blade (77.5m)	Hub (105m) & Blade (74.5m)	Highest Hub (105m) & Shortest Blade (77.5m)
							Maximum Rotor Diameter (155m)	Rotor Diameter (149m)	Rotor Diameter (150m)	Maximum Rotor Diameter (155m)	Rotor Diameter (149m)	Rotor Diameter (150m)	Mitigation required	Mitigation required	Mitigation required	Mitigation required	Mitigation required	Mitigation required
1	664755	669348	Derelict	No	563	T03	01:04:12	01:01:48	01:02:24	66:04:41	59:31:04	63:24:31	No	No	No	No	No	No
2	664757	669384	Derelict	No	574	T03	01:03:00	01:00:36	01:01:12	60:12:11	53:52:20	54:29:42	No	No	No	No	No	No
3	664651	668233	Derelict	Yes	671	T05	00:36:36	00:35:24	00:35:24	16:19:12	15:12:10	15:23:47	No	No	No	No	No	No
4	664658	668226	Derelict	Yes	681	T05	00:36:36	00:35:24	00:35:24	16:01:08	14:54:28	15:04:50	No	No	No	No	No	No
5	664710	668270	Derelict	Yes	696	T05	00:51:36	00:50:24	00:51:00	23:01:01	22:00:26	22:12:24	No	No	No	No	No	No
6	664729	669729	Dwelling	Yes	724	T03	01:09:36	01:07:48	01:08:24	40:19:44	38:18:54	38:42:08	No	No	No	No	No	No
7	664935	669202	Dwelling	No	730	T03	00:58:48	00:49:12	00:49:12	44:42:09	39:04:29	39:29:52	Yes	Yes	Yes	Yes	Yes	Yes
8	664248	667759	Dwelling	No	731	T07	00:54:36	00:52:12	00:52:48	18:15:55	16:50:50	17:02:38	Yes	Yes	Yes	Yes	Yes	Yes
9	664846	668871	Dwelling	No	735	T03	01:06:00	01:05:24	01:05:24	44:11:13	42:02:31	42:24:30	Yes	Yes	Yes	Yes	Yes	Yes
10	664331	670311	Dwelling	Yes	738	T02	00:46:12	00:43:48	00:44:24	17:53:34	17:21:56	17:35:10	No	No	No	No	No	No
11	663811	670370	Dwelling	No	740	T02	01:03:36	01:01:48	01:02:24	9:54:21	9:41:28	9:58:27	Yes	Yes	Yes	Yes	Yes	Yes
12	663248	670358	Dwelling	No	754	T01	01:12:36	01:07:48	01:09:36	23:50:11	22:29:44	22:44:24	Yes	Yes	Yes	Yes	Yes	Yes
13	662810	669032	Dwelling	Yes	760	T04	01:03:00	01:01:48	01:01:48	55:07:25	52:07:35	52:36:11	No	No	No	No	No	No
14	664694	668142	Dwelling	No	764	T05	00:35:24	00:34:12	00:34:12	10:48:52	10:17:03	10:25:05	Yes	Yes	Yes	Yes	Yes	Yes
15	663129	667556	Dwelling	No	769	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
16	664730	669905	Dwelling	No	776	T02	01:07:48	01:07:12	01:07:12	32:33:44	31:33:30	31:49:35	Yes	Yes	Yes	Yes	Yes	Yes
17	664492	670258	Dwelling	No	783	T02	00:47:24	00:45:36	00:45:36	23:13:54	22:29:12	22:41:43	Yes	Yes	Yes	Yes	Yes	Yes
18	664906	668826	Dwelling	No	789	T05	00:56:24	00:55:48	00:55:48	38:19:26	36:29:09	36:48:17	Yes	Yes	Yes	Yes	Yes	Yes
19	663155	670379	Dwelling	No	805	T01	00:39:00	00:34:48	00:34:48	16:32:47	15:35:24	15:49:10	Yes	Yes	Yes	Yes	Yes	Yes
20	664184	667519	Dwelling	Yes	837	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
21	663301	667369	Dwelling	Yes	839	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
22	664766	669999	Dwelling	Yes	844	T02	01:06:36	01:04:48	01:05:24	27:43:16	22:18:40	22:34:34	No	No	No	No	No	No
23	664803	669903	Dwelling	No	845	T02	01:01:48	01:00:36	01:01:12	31:15:16	30:09:29	30:26:17	Yes	Yes	Yes	Yes	Yes	Yes
24	663325	667345	Dwelling	No	853	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
25	662714	670037	Dwelling	Yes	853	T01	01:02:24	00:59:24	01:00:00	23:55:11	22:35:17	22:49:24	No	No	No	No	No	No
26	663126	667451	Dwelling	No	854	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
27	663330	667335	Dwelling	No	860	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
28	663939	667324	Derelict	No	877	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
29	665012	668660	Dwelling	No	878	T05	00:42:36	00:41:24	00:41:24	24:31:50	20:09:47	20:21:35	Yes	Yes	Yes	Yes	Yes	Yes
30	662806	667827	Dwelling	No	879	T07	00:44:24	00:43:12	00:43:12	15:14:18	14:21:24	14:32:39	Yes	Yes	Yes	Yes	Yes	Yes
31	664560	667888	Dwelling	No	883	T05	00:39:36	00:38:24	00:38:24	18:50:14	18:02:20	18:11:48	Yes	Yes	Yes	Yes	Yes	Yes
32	663989	667334	Dwelling	No	887	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
33	663363	667295	Dwelling	No	888	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
34	663374	667280	Dwelling	No	899	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
35	664409	667689	Dwelling	No	905	T07	00:45:00	00:43:12	00:43:12	16:46:11	15:48:48	15:58:17	Yes	Yes	Yes	Yes	Yes	Yes
36	664425	667697	Dwelling	Yes	915	T07	00:43:48	00:42:36	00:42:36	17:20:09	16:27:46	16:35:49	No	No	No	No	No	No
37	663026	670439	Dwelling	No	915	T01	00:35:24	00:34:12	00:34:48	15:09:40	14:25:52	14:37:18	Yes	Yes	Yes	Yes	Yes	Yes
38	663398	667254	Dwelling	No	918	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
39	663964	667288	Dwelling	No	919	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No

40	662993	670442	Dwelling	No	935	T01	00:36:36	00:35:24	00:35:24	15:27:53	14:46:36	14:57:41	Yes	Yes	Yes	Yes	Yes	Yes
41	662647	670120	Dwelling	No	952	T01	00:54:00	00:51:00	00:51:36	20:40:10	19:34:23	19:47:05	Yes	Yes	Yes	Yes	Yes	Yes
42	662559	668274	Dwelling	Yes	953	T06	00:41:24	00:39:36	00:40:12	21:40:35	20:03:31	20:20:52	No	No	No	No	No	No
43	662615	668141	Dwelling	Yes	958	T06	00:42:36	00:40:48	00:40:48	23:43:12	22:28:19	22:40:28	No	No	No	No	No	No
44	662644	668087	Dwelling	No	961	T06	00:42:36	00:40:48	00:41:24	20:52:52	19:38:30	19:49:56	Yes	Yes	Yes	Yes	Yes	Yes
45	663918	667216	Dwelling	No	972	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
46	663826	667178	Dwelling	No	986	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
47	662466	668534	Dwelling	No	988	T06	00:38:24	00:37:12	00:37:12	24:36:29	22:59:03	23:18:11	Yes	Yes	Yes	Yes	Yes	Yes
48	663538	667148	Dwelling	No	999	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
49	662773	670363	Dwelling	No	1004	T01	00:37:48	00:37:12	00:37:48	18:46:29	17:45:10	17:57:30	Yes	Yes	Yes	Yes	Yes	Yes
50	662462	668423	Dwelling	No	1006	T06	00:38:24	00:36:36	00:37:12	24:42:33	23:08:00	23:23:43	Yes	Yes	Yes	Yes	Yes	Yes
51	662444	668478	Dwelling	No	1015	T06	00:37:48	00:36:36	00:36:36	24:24:41	22:54:35	23:09:36	Yes	Yes	Yes	Yes	Yes	Yes
52	663423	667148	Dwelling	No	1015	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
53	662555	669161	Dwelling	No	1017	T04	00:39:36	00:38:24	00:38:24	41:11:35	33:50:25	34:14:01	Yes	Yes	Yes	Yes	Yes	Yes
54	662820	670424	Dwelling	No	1019	T01	00:36:00	00:34:48	00:34:48	17:40:31	16:57:59	17:06:55	Yes	Yes	Yes	Yes	Yes	Yes
55	663804	667138	Dwelling	No	1021	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
56	662595	670170	Dwelling	No	1022	T01	00:49:12	00:36:36	00:46:48	18:57:55	14:43:44	18:14:51	Yes	Yes	Yes	Yes	Yes	Yes
57	662611	670210	Dwelling	Yes	1030	T01	00:46:48	00:36:36	00:46:48	18:25:13	14:06:12	17:40:42	No	No	No	No	No	No
58	665216	668993	Dwelling	No	1039	T03	00:34:12	00:33:36	00:33:36	14:11:12	13:45:07	13:53:41	Yes	Yes	Yes	Yes	Yes	Yes
59	665079	668228	Dwelling	Yes	1040	T05	00:31:48	00:31:12	00:31:48	11:52:08	11:27:18	11:35:20	No	No	No	No	No	No
60	663743	667105	Dwelling	No	1045	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
61	663871	667124	Dwelling	No	1048	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
62	662869	670498	Dwelling	No	1049	T01	00:34:48	00:33:36	00:33:36	14:41:04	14:07:49	14:17:17	Yes	Yes	Yes	Yes	Yes	Yes
63	665075	668191	Dwelling	No	1052	T05	00:32:24	00:31:48	00:32:24	12:00:22	11:42:08	11:47:40	Yes	Yes	Yes	Yes	Yes	Yes
64	662394	668552	Dwelling	No	1058	T06	00:36:00	00:34:48	00:34:48	19:10:05	17:49:38	18:03:24	Yes	Yes	Yes	Yes	Yes	Yes
65	662383	668680	Dwelling	No	1069	T06	00:35:24	00:34:12	00:34:12	17:14:36	16:03:17	16:15:37	Yes	Yes	Yes	Yes	Yes	Yes
66	662672	670353	Dwelling	Yes	1070	T01	00:37:12	00:36:00	00:36:00	14:47:40	10:09:22	13:57:37	No	No	No	No	No	No
67	663696	667075	Dwelling	No	1071	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
68	662689	670374	Dwelling	No	1072	T01	00:37:12	00:36:00	00:36:00	16:41:00	11:30:52	15:26:38	Yes	Yes	Yes	Yes	Yes	Yes
69	662699	670391	Dwelling	No	1077	T01	00:36:36	00:36:00	00:36:00	17:05:40	12:21:06	16:16:52	Yes	Yes	Yes	Yes	Yes	Yes
70	664943	667950	Dwelling	No	1077	T05	00:19:48	00:19:48	00:19:48	2:02:05	1:57:16	1:58:31	Yes	Yes	Yes	Yes	Yes	Yes
71	663516	667064	Dwelling	No	1084	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
72	662364	668591	Dwelling	No	1086	T06	00:34:48	00:33:36	00:34:12	17:27:07	16:14:22	16:25:59	Yes	Yes	Yes	Yes	Yes	Yes
73	662369	668713	Dwelling	No	1086	T06	00:34:48	00:33:36	00:33:36	16:33:19	15:22:21	15:33:37	Yes	Yes	Yes	Yes	Yes	Yes
74	663589	667055	Dwelling	No	1089	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
75	663840	667065	Dwelling	No	1099	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
76	663767	667051	Dwelling	No	1101	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
77	662457	669149	Dwelling	No	1115	T04	00:36:00	00:34:48	00:35:24	31:43:41	24:40:57	24:55:36	Yes	Yes	Yes	Yes	Yes	Yes
78	662430	669160	Dwelling	No	1142	T01	00:35:24	00:34:12	00:34:12	25:26:21	23:54:39	24:10:12	Yes	Yes	Yes	Yes	Yes	Yes
79	662564	670346	Dwelling	No	1148	T01	00:34:48	00:33:00	00:33:36	7:30:27	7:05:25	7:10:15	Yes	Yes	Yes	Yes	Yes	Yes
80	662307	668832	Dwelling	No	1165	T06	00:32:24	00:31:12	00:31:48	20:02:27	18:25:13	18:39:31	Yes	Yes	Yes	Yes	Yes	Yes
81	662525	670338	Dwelling	No	1174	T01	00:33:36	00:32:24	00:32:24	6:27:21	6:08:24	6:11:59	Yes	Yes	Yes	Yes	Yes	Yes
82	663578	666967	Dwelling	No	1177	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
83	663481	666974	Dwelling	No	1179	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
84	663694	666963	Dwelling	No	1182	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
85	663440	666951	Dwelling	No	1206	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
86	662426	670251	Dwelling	No	1209	T01	00:32:24	00:31:12	00:31:12	5:24:47	5:09:36	5:12:38	Yes	Yes	Yes	Yes	Yes	Yes
87	663753	666934	Dwelling	No	1215	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
88	662692	667301	Dwelling	No	1257	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
89	663806	666895	Dwelling	No	1261	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
90	662593	667408	Dwelling	No	1268	T07	00:32:24	00:31:12	00:31:12	7:47:26	7:22:14	7:25:37	Yes	Yes	Yes	Yes	Yes	Yes
91	662218	669864	Dwelling	No	1269	T01	00:30:00	00:28:48	00:29:24	4:31:31	4:12:34	4:15:26	Yes	Yes	Yes	Yes	Yes	Yes
92	663843	666881	Dwelling	No	1281	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
93	662223	669030	Dwelling	No	1297	T06	00:30:00	00:28:48	00:28:48	19:00:25	17:49:38	18:03:46	Yes	Yes	Yes	Yes	Yes	Yes

94	662216	669063	Dwelling	No	1315	T06	00:30:00	00:28:48	00:28:48	17:18:00	16:08:28	16:22:46	Yes	Yes	Yes	Yes	Yes	Yes
95	665469	668775	Dwelling	No	1340	T05	00:04:48	00:04:12	00:04:48	0:19:40	0:18:14	0:19:18	Yes	Yes	Yes	Yes	Yes	Yes
96	662161	669062	Dwelling	No	1366	T06	00:28:48	00:27:36	00:27:36	15:03:13	14:02:27	14:13:21	Yes	Yes	Yes	Yes	Yes	Yes
97	662171	669120	Dwelling	No	1377	T06	00:28:48	00:28:12	00:28:12	14:28:33	13:28:29	13:38:19	Yes	Yes	Yes	Yes	Yes	Yes
98	662155	669120	Dwelling	No	1392	T06	00:28:48	00:27:36	00:28:12	14:02:05	13:07:45	13:17:03	Yes	Yes	Yes	Yes	Yes	Yes
99	663880	666774	Dwelling	No	1393	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
100	662115	669273	Dwelling	No	1401	T01	00:28:12	00:27:36	00:27:36	12:11:05	11:19:36	11:28:01	Yes	Yes	Yes	Yes	Yes	Yes
101	662147	669133	Dwelling	No	1403	T06	00:28:48	00:27:36	00:27:36	13:44:24	12:49:31	12:58:17	Yes	Yes	Yes	Yes	Yes	Yes
102	665541	668625	Dwelling	No	1408	T05	00:06:36	00:06:00	00:06:00	1:06:08	1:04:00	1:05:47	Yes	Yes	Yes	Yes	Yes	Yes
103	662379	667470	Dwelling	No	1417	T07	00:29:24	00:28:12	00:28:12	9:02:09	8:35:31	8:43:12	Yes	Yes	Yes	Yes	Yes	Yes
104	662808	670895	Dwelling	No	1420	T01	00:06:00	00:04:12	00:05:24	0:11:16	0:06:15	0:09:18	Yes	Yes	Yes	Yes	Yes	Yes
105	662051	669508	Dwelling	No	1422	T01	00:27:36	00:26:24	00:26:24	3:58:27	3:40:24	3:43:26	Yes	Yes	Yes	Yes	Yes	Yes
106	662119	669157	Dwelling	No	1431	T01	00:28:12	00:27:00	00:27:36	12:56:40	12:00:43	12:09:50	Yes	Yes	Yes	Yes	Yes	Yes
107	662025	669496	Dwelling	No	1449	T01	00:27:00	00:25:48	00:26:24	3:50:35	3:36:07	3:38:37	Yes	Yes	Yes	Yes	Yes	Yes
108	663999	666736	Dwelling	No	1455	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
109	663029	666795	Dwelling	No	1475	T07	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
110	665704	669222	Dwelling	No	1499	T03	00:24:36	00:00:00	00:24:00	2:20:51	0:00:00	2:17:17	Yes	No	Yes	Yes	No	Yes
111	661971	669523	Dwelling	No	1501	T01	00:25:48	00:00:00	00:00:00	3:33:04	0:00:00	0:00:00	Yes	No	No	Yes	No	No
112	662801	670986	Dwelling	No	1504	T01	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
113	661963	669812	Dwelling	No	1514	T01	00:25:48	00:00:00	00:00:00	3:15:55	0:00:00	0:00:00	Yes	No	No	Yes	No	No
114	662811	671005	Dwelling	No	1517	T01	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
115	662822	671026	Dwelling	No	1532	T01	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
116	662832	671046	Dwelling	No	1546	T01	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No
117	661933	669017	Dwelling	No	1571	T06	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	No	No	No	No	No	No