



APPENDIX 5-3

*SHADOW FLICKER
COMPARISON TABLES*

House ID	ITM Coordinates (Easting)	ITM Coordinates (Northing)	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)		
					Lowest Hub (102.5m) & Longest Blade (81.5m)	Intermediate Hub (105m) & Shortest Blade (74.5m)	Highest Hub (110.5m) & Shortest Blade (74.5m)	Lowest Hub (102.5m) & Longest Blade (81.5m)	Intermediate Hub (105m) & Shortest Blade (74.5m)	Highest Hub (110.5m) & Shortest Blade (74.5m)
					HH 102.5 & RD 163	HH 105 & RD 156	HH 110.5 & RD 149	HH 102.5 & RD 163	HH 105 & RD 156	HH 110.5 & RD 149
581	555873.4499	668358.7299	1094	T07	00:22:48	00:19:48	00:19:12	3:25:31	2:32:54	2:05:02
487	557967.84	668483.5399	1361	T07	00:31:12	00:28:48	00:28:48	8:50:12	7:30:38	7:46:02
582	555733.11	668529.31	1033	T04	00:37:48	00:34:48	00:34:48	14:57:36	13:20:04	13:41:31
583	555661.4999	668598.1	1010	T04	00:36:00	00:33:36	00:33:36	10:45:20	7:39:59	7:58:52
488	557958.1399	668613.31	1304	T07	00:31:48	00:29:24	00:29:24	6:58:44	5:59:53	6:06:51
489	558030.02	668632.8599	1245	T09	00:30:36	00:28:12	00:28:12	5:58:14	5:08:44	5:12:02
584	555591.9999	668689.5999	977	T04	00:34:48	00:31:48	00:31:48	13:39:19	5:37:42	5:51:49
585	555714.0999	668771.0999	838	T04	00:39:00	00:36:00	00:36:00	15:44:43	14:13:36	14:26:15
441	559976.03	668872.1999	1306	T09	00:31:12	00:27:36	00:27:00	6:53:14	5:35:30	5:05:59
440	559942.73	668902.13	1262	T09	00:32:24	00:28:48	00:28:12	7:24:24	6:03:22	5:32:45
438	559911.0899	668930.67	1220	T09	00:33:36	00:30:00	00:29:24	7:57:02	6:32:53	6:01:21
439	559985.74	668954.72	1273	T09	00:34:12	00:31:12	00:31:12	10:24:37	9:06:20	8:44:53
490	558139.5599	669036.8199	892	T09	00:33:00	00:28:48	00:28:48	17:12:32	13:23:33	12:37:43
491	557766.4699	669043.39	1034	T06	01:06:00	00:58:48	00:58:48	36:33:24	27:57:30	27:43:23
437	559549.56	669243.5199	754	T09	00:12:00	00:09:36	00:10:48	1:47:15	1:20:07	1:28:55
492	557626.1599	669426.6199	751	T06	01:15:00	01:10:12	01:10:48	58:21:40	50:33:37	50:47:00
359	552659.7553	670158.8233	767	T02	00:50:24	00:46:12	00:46:12	17:56:21	16:05:04	17:00:26
716	560362.36	670199.14	1631	T09	00:25:12	00:00:00	00:00:00	3:29:33	0:00:00	0:00:00

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					Lowest Hub (102.5m) & Longest Blade (81.5m)	Intermediate Hub (105m) & Shortest Blade (74.5m)	Highest Hub (110.5m) & Shortest Blade (74.5m)	Lowest Hub (102.5m) & Longest Blade (81.5m)	Intermediate Hub (105m) & Shortest Blade (74.5m)	Highest Hub (110.5m) & Shortest Blade (74.5m)
					HH 102.5 & RD 163	HH 105 & RD 156	HH 110.5 & RD 149	HH 102.5 & RD 163	HH 105 & RD 156	HH 110.5 & RD 149
358	552441.0999	670202.4	989	T02	00:39:36	00:37:48	00:37:48	14:09:12	12:40:06	13:05:24
715	560289.25	670264.6799	1592	T09	00:26:24	00:00:00	00:00:00	3:49:43	0:00:00	0:00:00
714	560265.5	670294.4	1584	T09	00:26:24	00:00:00	00:00:00	3:57:14	0:00:00	0:00:00
713	560232.09	670331.63	1573	T09	00:26:24	00:00:00	00:00:00	4:08:36	0:00:00	0:00:00
326	551913.9299	670577.05	1589	T02	00:25:48	00:00:00	00:00:00	3:20:01	0:00:00	0:00:00
493	557743.5999	670601.6	996	T08	01:04:12	00:58:12	00:58:12	31:03:13	25:18:33	25:13:47
494	557867.3399	670675.48	968	T08	01:20:24	01:03:36	01:03:36	33:03:51	26:48:23	27:15:53
434	558202.5699	670679.7	810	T08	01:12:36	01:06:00	01:08:24	16:37:53	14:24:36	15:48:56
495	557930.2	670761.9	1003	T08	01:24:36	00:35:24	00:35:24	29:14:41	14:10:29	14:45:08
325	552032.2999	670774	1555	T02	00:26:24	00:00:00	00:00:00	3:35:58	0:00:00	0:00:00
322	552164.27	670790.6	1447	T02	00:28:12	00:25:48	00:25:48	4:10:15	3:33:13	3:31:45
324	552048.9799	670800.52	1553	T02	00:26:24	00:00:00	00:00:00	3:39:27	0:00:00	0:00:00
436	558977.9999	670803.5999	1029	T08	00:36:36	00:33:00	00:33:36	9:43:55	8:36:27	9:10:33
708	559889.8999	670809.3	1619	T09	00:21:36	00:00:00	00:00:00	4:02:11	0:00:00	0:00:00
323	552075.3499	670829.15	1543	T02	00:26:24	00:00:00	00:00:00	3:45:30	0:00:00	0:00:00
435	558921.6999	670844.3	1038	T08	00:31:48	00:31:12	00:31:12	6:49:01	5:55:51	6:33:37
433	558174.41	670857.5199	988	T08	00:43:48	00:35:24	00:42:00	5:48:09	4:12:38	5:38:04
321	552093.2799	670892.01	1559	T02	00:26:24	00:00:00	00:00:00	3:43:51	0:00:00	0:00:00

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					HH 102.5 & RD 163	HH 105 & RD 156	HH 110.5 & RD 149	HH 102.5 & RD 163	HH 105 & RD 156	HH 110.5 & RD 149
310	553073.21	670896.15	891	T02	01:18:00	01:11:24	01:11:24	28:12:54	24:17:08	23:59:43
431	559049.4899	670916.6099	1163	T08	00:30:36	00:30:00	00:30:36	7:10:17	6:21:53	6:52:19
432	558775.58	670922	1056	T08	00:05:24	00:00:00	00:06:36	0:08:48	0:00:00	0:13:23
320	552106.5999	670922.5999	1564	T02	00:26:24	00:00:00	00:00:00	3:46:58	0:00:00	0:00:00
430	559096.2999	670924.7799	1194	T08	00:31:12	00:30:00	00:30:36	7:40:32	6:52:52	7:18:43
429	559149.05	670926.97	1224	T08	00:31:12	00:30:00	00:30:00	8:23:04	7:31:44	7:54:50
319	552123.4	670949.36	1565	T02	00:26:24	00:00:00	00:00:00	3:49:54	0:00:00	0:00:00
312	552790.4099	670972.66	1097	T02	01:03:00	00:34:12	00:34:12	12:22:41	7:52:49	8:01:15
318	552293.2499	670980.31	1446	T02	00:28:12	00:26:24	00:25:48	4:34:38	3:56:52	3:54:51
311	553166.72	671018.06	976	T02	01:12:36	01:07:48	01:07:48	25:07:22	22:32:49	22:57:56
316	552284.17	671028.7499	1484	T02	00:27:36	00:25:48	00:25:48	4:27:18	3:51:55	3:48:48
317	552284.17	671028.7499	1484	T02	00:27:36	00:25:48	00:25:48	4:27:18	3:51:55	3:48:48
426	558906.92	671075.08	1244	T08	00:00:00	00:00:00	00:01:48	0:00:00	0:00:00	0:00:55
421	558047.2399	671085.2799	1244	T08	00:13:12	00:06:36	00:13:12	0:55:00	0:13:45	0:56:28
420	557806.4399	671136.47	1389	T08	00:25:12	00:22:48	00:24:00	3:59:15	3:19:50	3:49:10
427	559084.1599	671151.9399	1386	T08	00:12:00	00:06:36	00:12:00	0:49:30	0:14:29	0:50:36
428	559153.4	671191.46	1453	T08	00:07:48	00:00:00	00:07:48	0:22:11	0:00:00	0:23:17
309	553595.6099	671200.4999	1138	T02	00:23:24	00:19:48	00:22:48	2:53:37	2:05:24	2:50:52

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					HH 102.5 & RD 163	HH 105 & RD 156	HH 110.5 & RD 149	HH 102.5 & RD 163	HH 105 & RD 156	HH 110.5 & RD 149
308	553440.8599	671226.95	1151	T02	00:46:48	00:40:48	00:45:00	6:24:27	4:59:56	6:14:55
916	557980.1408	668543.8462	1345	T09	00:31:12	00:28:48	00:28:48	7:20:44	6:20:03	6:26:17
931	560218.6902	670389.6902	1591	T09	00:26:24	00:00:00	00:00:00	4:15:01	0:00:00	0:00:00
907	552520.8926	671115	1375	T02	00:30:00	00:27:36	00:27:36	5:36:25	4:56:49	4:58:50
Grey cell denotes exceedance										