

Technical Appendix 12.2: Shadow Flicker Assessment Output

Shadow Flicker Assessment Output -Results Per House

Project : BARNESMORE WF TEST
Run Name : KBARNESMORE001.WFK
Title : Barnesmore WF Nov 19
Time : 10:16:44, 13 Nov 2019

SUMMARY OF MERGED SHADOW TIMES ON EACH HOUSE FROM ALL TURBINES

House	Easting	Northing	Days per year	Max hours per day	Mean hours per day	Total hours
19	201753	381258	48	0.48	0.29	14.0

Shadow Flicker Assessment Output -Results Per Window

Project : BARNESMORE WF TEST
Run Name : KBARNESMORE001.WFK
Title : Barnesmore WF Nov 19
Time : 10:16:44, 13 Nov 2019

SUMMARY OF MERGED SHADOW TIMES ON EACH WINDOW FOR ALL TURBINES

House/ Window	Easting	Northing	Width (m)	Depth (m)	Height (m)	Degrees from North	Tilt angle	Days per year	Max hours per day	Mean hours per day	Total hours
19/ 1	201753	381258	1.0	1.0	2.0	0.0	0.0	48	0.48	0.29	13.9
19/ 2	201753	381258	1.0	1.0	2.0	90.0	0.0	48	0.48	0.29	14.0
19/ 3	201753	381258	1.0	1.0	2.0	180.0	0.0	0	0.00	0.00	0.0
19/ 4	201753	381258	1.0	1.0	2.0	360.0	0.0	48	0.48	0.29	13.9

Shadow Flicker Assessment Output -Results Per Turbine

Project : BARNESMORE WF TEST
Run Name : KBARNESMORE001.WFK
Title : Barnesmore WF Nov 19
Time : 10:16:44, 13 Nov 2019

SUMMARY OF MERGED SHADOW TIMES FROM EACH TURBINE ON ALL HOUSES

Turbine	Easting	Northing	Days per year	Max hours per day	Mean hours per day	Total hours
1	205046	383572	0	0.00	0.00	0.0
2	204988	383036	0	0.00	0.00	0.0
3	204695	383157	0	0.00	0.00	0.0
4	204593	382722	0	0.00	0.00	0.0
5	204157	383741	0	0.00	0.00	0.0
6	203300	383001	0	0.00	0.00	0.0
7	203719	383095	0	0.00	0.00	0.0
8	204241	382986	0	0.00	0.00	0.0
9	203643	382336	0	0.00	0.00	0.0
10	203870	381921	0	0.00	0.00	0.0
11	204359	382279	0	0.00	0.00	0.0
12	203404	381855	18	0.26	0.17	3.0
13	203124	381426	30	0.48	0.37	11.0

Shadow Flicker Assessment Output -Results Detailed

Project : BARNESMORE WF TEST
Run Name : KBARNESMORE001.WFK
Title : Barnesmore WF Nov 19
Time : 10:16:44, 13 Nov 2019

SHADOW TIMES ON EACH HOUSE

House	Easting	Northing					
19	201753	381258					
Turbine	Easting	Northing	Date	Start Time	End Time	Duration	% Cover
12	203404	381855	06-05	05:22:55	05:23:33	00:00:38	100.00
12	203404	381855	07-05	05:23:08	05:27:20	00:04:12	100.00
12	203404	381855	08-05	05:23:29	05:30:56	00:07:27	100.00
12	203404	381855	09-05	05:23:58	05:34:21	00:10:23	100.00
12	203404	381855	10-05	05:24:37	05:37:35	00:12:58	100.00
12	203404	381855	11-05	05:25:27	05:40:40	00:15:13	100.00
12	203404	381855	12-05	05:26:31	05:42:02	00:15:31	100.00
12	203404	381855	13-05	05:27:55	05:40:51	00:12:56	82.43
12	203404	381855	14-05	05:29:57	05:38:52	00:08:55	37.44
12	203404	381855	29-07	05:40:23	05:48:42	00:08:20	32.85
12	203404	381855	30-07	05:38:12	05:50:44	00:12:32	76.62
12	203404	381855	31-07	05:36:42	05:52:07	00:15:25	100.00
12	203404	381855	01-08	05:35:31	05:51:06	00:15:34	100.00
12	203404	381855	02-08	05:34:34	05:47:57	00:13:23	100.00
12	203404	381855	03-08	05:33:47	05:44:38	00:10:51	100.00
12	203404	381855	04-08	05:33:08	05:41:08	00:07:59	100.00
12	203404	381855	05-08	05:32:37	05:37:26	00:04:49	100.00
12	203404	381855	06-08	05:32:12	05:33:31	00:01:19	100.00
13	203124	381426	10-04	06:12:15	06:16:18	00:04:04	100.00
13	203124	381426	11-04	06:11:19	06:26:23	00:15:04	100.00
13	203124	381426	12-04	06:10:36	06:35:32	00:24:56	100.00
13	203124	381426	13-04	06:10:03	06:38:32	00:28:29	100.00
13	203124	381426	14-04	06:09:40	06:38:25	00:28:45	100.00
13	203124	381426	15-04	06:09:26	06:38:09	00:28:43	100.00
13	203124	381426	16-04	06:09:21	06:37:45	00:28:24	100.00
13	203124	381426	17-04	06:09:26	06:37:13	00:27:46	100.00
13	203124	381426	18-04	06:09:41	06:36:31	00:26:50	100.00
13	203124	381426	19-04	06:10:07	06:35:39	00:25:33	100.00
13	203124	381426	20-04	06:10:44	06:34:36	00:23:52	100.00
13	203124	381426	21-04	06:11:37	06:33:20	00:21:43	100.00
13	203124	381426	22-04	06:12:50	06:31:45	00:18:55	100.00
13	203124	381426	23-04	06:14:32	06:29:42	00:15:10	96.14
13	203124	381426	24-04	06:17:15	06:26:39	00:09:24	35.87
13	203124	381426	18-08	06:24:08	06:31:09	00:07:01	19.57
13	203124	381426	19-08	06:20:28	06:34:19	00:13:52	78.55
13	203124	381426	20-08	06:18:09	06:36:07	00:17:58	100.00
13	203124	381426	21-08	06:16:24	06:37:21	00:20:57	100.00
13	203124	381426	22-08	06:14:59	06:38:15	00:23:15	100.00
13	203124	381426	23-08	06:13:49	06:38:53	00:25:03	100.00
13	203124	381426	24-08	06:12:51	06:39:18	00:26:27	100.00
13	203124	381426	25-08	06:12:03	06:39:33	00:27:29	100.00
13	203124	381426	26-08	06:11:24	06:39:37	00:28:13	100.00
13	203124	381426	27-08	06:10:54	06:39:33	00:28:39	100.00
13	203124	381426	28-08	06:10:32	06:39:20	00:28:47	100.00
13	203124	381426	29-08	06:10:19	06:38:57	00:28:38	100.00
13	203124	381426	30-08	06:10:14	06:38:21	00:28:08	100.00
13	203124	381426	31-08	06:10:18	06:29:50	00:19:33	100.00
13	203124	381426	01-09	06:10:32	06:19:39	00:09:07	100.00