



Islandmore Wind Farm

Environmental Impact Assessment
Report

Annex 13.3: Cumulative Shadow
Flicker Prediction Model

Islandmore Wind Farm Limited

SHADOW - Main Result

Calculation: Cumulative Shadow Flicker Predictions

Assumptions for shadow calculations

Maximum distance for influence 1,850 m
Minimum sun height over horizon for influence 3 °
Day step for calculation 1 days
Time step for calculation 1 minutes

Sunshine probability S (Average daily sunshine hours) [CLONES]

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.45	1.93	2.72	4.31	5.45	4.41	4.74	3.96	3.48	2.54	1.71	1.01

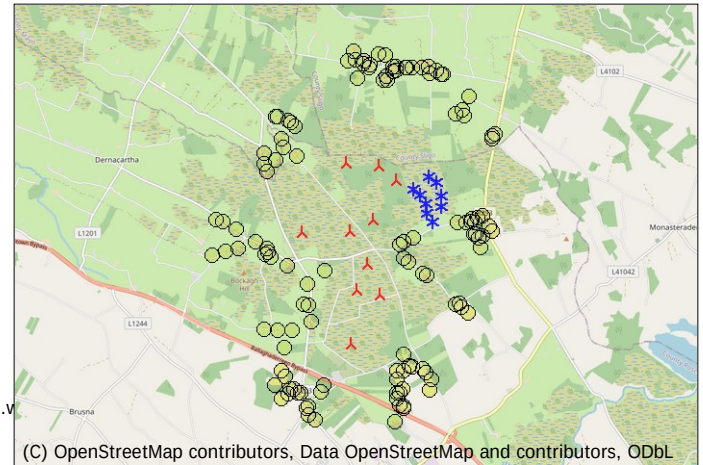
Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
573	339	390	523	586	662	885	1,296	962	1,018	919	607	8,760

A ZVI (Zones of Visual Influence) calculation is performed before flicker calculation so non visible WTG do not contribute to calculated flicker values. A WTG will be visible if it is visible from any part of the receiver window. The ZVI calculation is based on the following assumptions:

Height contours used: Elevation Grid Data Object: Islandmore Wind Farm_EMDGrid_0.v
Receptor grid resolution: 1.0 m

All coordinates are in
Irish ITM-IRENET95 (IE), geocentric, GRS80



Scale 1:125,000
New WTG Existing WTG Shadow receptor

WTGs

	Easting	Northing	Z [m]	Row data/Description	WTG type		Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Shadow data	
					Valid	Manufact.				Calculation distance [m]	RPM [RPM]
1	561,862	800,538	150.5	T01	Yes	VESTAS	V162-7.2-7,200	7,200	162.0	104.0	1,850 9.5
2	562,401	800,480	162.8	T02	Yes	VESTAS	V162-7.2-7,200	7,200	162.0	104.0	1,850 9.5
3	562,695	800,222	168.3	T03	Yes	VESTAS	V162-7.2-7,200	7,200	162.0	104.0	1,850 9.5
4	562,316	799,576	156.3	T04	Yes	VESTAS	V136-4.5-4,500	4,500	136.0	82.0	1,850 10.4
5	561,920	799,411	166.8	T05	Yes	VESTAS	V136-4.5-4,500	4,500	136.0	82.0	1,850 10.4
6	561,124	799,382	153.9	T06	Yes	VESTAS	V136-4.5-4,500	4,500	136.0	82.0	1,850 10.4
7	562,209	798,866	160.3	T07	Yes	VESTAS	V136-4.5-4,500	4,500	136.0	82.0	1,850 10.4
8	562,021	798,429	149.1	T08	Yes	VESTAS	V136-4.5-4,500	4,500	136.0	82.0	1,850 10.4
9	562,413	798,339	142.6	T09	Yes	VESTAS	V136-4.5-4,500	4,500	136.0	82.0	1,850 10.4
10	561,924	797,528	143.4	T10	Yes	VESTAS	V136-4.5-4,500	4,500	136.0	82.0	1,850 10.4
11	563,299	799,551	191.4	Largan Hill T01	No	VESTAS	V47-660	660	47.0	40.0	1,850 28.5
12	563,207	799,684	197.0	Largan Hill T02	No	VESTAS	V47-660	660	47.0	40.0	1,850 28.5
13	563,188	799,851	183.7	Largan Hill T03	No	VESTAS	V47-660	660	47.0	40.0	1,850 28.5
14	563,100	799,998	176.7	Largan Hill T04	No	VESTAS	V47-660	660	47.0	40.0	1,850 28.5
15	562,996	800,084	173.8	Largan Hill T05	No	VESTAS	V47-660	660	47.0	40.0	1,850 28.5
16	563,245	800,301	170.7	Largan Hill T06	No	VESTAS	V47-660	660	47.0	40.0	1,850 28.5
17	563,367	800,202	172.6	Largan Hill T07	No	VESTAS	V47-660	660	47.0	40.0	1,850 28.5
18	563,432	799,983	177.9	Largan Hill T08	No	VESTAS	V47-660	660	47.0	40.0	1,850 28.5
19	563,446	799,784	181.3	Largan Hill T09	No	VESTAS	V47-660	660	47.0	40.0	1,850 28.5

Shadow receptor-Input

No.	Name	Easting	Northing	Z	Width	Height	Elevation a.g.l.	Slope of window	Direction mode	Eye height (ZVI) a.g.l.
				[m]	[m]	[m]	[m]	[°]		[m]
A	R001	560,365	799,243	174.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
B	R002	560,505	800,693	143.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
C	R003	560,510	800,516	149.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
D	R004	560,524	799,026	182.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
E	R005	560,722	801,304	129.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
F	R006	562,427	802,329	120.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
G	R007	562,733	796,721	110.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
H	R008	562,276	802,153	118.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
I	R009	561,471	796,857	126.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
J	R010	560,061	799,437	168.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
K	R011	560,969	801,208	136.1	1.5	1.5	1.0	90.0	"Green house mode"	2.5
L	R012	560,621	798,987	182.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
M	R013	563,686	801,322	152.2	1.5	1.5	1.0	90.0	"Green house mode"	2.5
N	R014	562,816	797,075	119.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
O	R015	561,422	796,757	123.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5

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Project:

Islandmore Wind Farm

Licensed user:

Galetech Energy Services

Clondargan, Stradone

IE-CO. CAVAN H12 NV06

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Joseph Buckley / joe.buckley@galetechenergy.com

Calculated:

21/01/2026 13:03/3.6.366

SHADOW - Main Result

Calculation: Cumulative Shadow Flicker Predictions

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No.	Name	Easting	Northing	Z	Width	Height	Elevation	Slope of	Direction mode	Eye height
				[m]	[m]	[m]	a.g.l.	window		(ZVI) a.g.l.
							[m]	[°]		[m]
P	R016	562,725	796,515	98.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
Q	R017	562,807	797,344	132.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
R	R018	562,695	796,726	112.2	1.5	1.5	1.0	90.0	"Green house mode"	2.5
S	R019	564,036	799,619	130.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
T	R020	560,564	800,400	151.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
U	R021	562,693	796,621	104.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
V	R022	562,805	796,469	95.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
W	R023	563,127	802,101	115.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
X	R024	560,069	799,135	185.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
Y	R025	562,701	802,122	113.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
Z	R026	560,842	796,999	130.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AA	R027	562,989	799,278	164.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AB	R028	561,038	801,145	138.2	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AC	R029	561,207	798,534	154.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AD	R030	563,995	799,516	132.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AE	R031	559,706	799,601	151.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AF	R032	563,736	798,186	127.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AG	R033	562,024	802,362	120.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AH	R034	560,809	800,931	131.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AI	R035	562,825	798,947	156.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AJ	R036	561,216	796,372	116.4	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AK	R037	562,025	802,234	118.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AL	R038	560,909	796,807	126.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AM	R039	560,664	796,875	134.1	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AN	R040	559,861	799,081	175.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AO	R041	564,296	800,905	132.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AP	R042	562,949	797,140	117.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AQ	R043	560,722	797,760	172.4	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AR	R044	563,165	797,050	106.1	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AS	R045	562,197	802,205	119.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AT	R046	563,498	801,979	118.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AU	R047	560,545	799,115	176.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AV	R048	559,635	799,024	155.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AW	R049	562,168	802,161	118.2	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AX	R050	562,784	796,780	110.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AY	R051	561,913	802,216	117.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
AZ	R052	563,805	801,381	141.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BA	R053	563,862	799,512	143.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BB	R054	563,977	799,351	135.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BC	R055	560,480	797,797	171.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BD	R056	562,693	796,950	118.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BE	R057	561,335	796,276	113.1	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BF	R058	560,981	796,799	126.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BG	R059	563,868	798,038	121.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BH	R060	563,126	797,127	109.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BI	R061	562,699	802,043	115.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BJ	R062	563,918	799,547	138.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BK	R063	562,892	797,162	121.1	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BL	R064	562,265	802,097	117.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BM	R065	563,258	802,112	114.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BN	R066	562,549	801,951	119.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BO	R067	560,891	798,830	177.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BP	R068	560,829	800,779	134.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BQ	R069	563,703	799,533	160.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BR	R070	563,277	801,989	117.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BS	R071	560,813	797,480	153.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BT	R072	563,384	802,047	117.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BU	R073	560,765	796,651	127.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BV	R074	562,089	801,916	120.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BW	R075	562,896	802,100	113.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BX	R076	564,288	799,380	127.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BY	R077	562,863	802,102	113.2	1.5	1.5	1.0	90.0	"Green house mode"	2.5
BZ	R078	563,203	798,640	163.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CA	R079	561,141	798,198	151.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CB	R080	564,127	799,626	129.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5

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SHADOW - Main Result

Calculation: Cumulative Shadow Flicker Predictions

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No.	Name	Easting	Northing	Z	Width	Height	Elevation a.g.l.	Slope of window	Direction mode	Eye height (ZVI) a.g.l.
				[m]	[m]	[m]	[m]	[°]		[m]
CC R081		562,795	796,491	96.1	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CD R082		561,053	800,641	139.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CE R083		562,656	802,127	113.2	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CF R084		561,170	796,475	116.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CG R085		563,962	799,587	137.4	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CH R086		559,834	799,581	157.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CI R087		560,574	799,049	178.4	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CJ R088		563,677	798,185	128.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CK R089		563,247	796,932	103.4	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CL R090		562,899	798,885	158.2	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CM R091		561,278	797,908	142.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CN R092		562,975	802,084	113.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CO R093		561,215	796,507	115.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CP R094		560,971	797,777	158.2	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CQ R095		562,698	797,069	122.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CR R096		564,338	800,988	126.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CS R097		562,539	802,289	112.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CT R098		564,067	799,278	129.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CU R099		560,891	796,707	125.0	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CV R100		563,449	801,984	119.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CW R101		562,634	796,238	91.1	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CX R102		561,503	798,752	158.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CY R103		561,243	798,164	147.4	1.5	1.5	1.0	90.0	"Green house mode"	2.5
CZ R104		560,722	800,592	146.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DA R105		564,131	799,294	125.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DB R106		563,237	796,752	100.2	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DC R107		560,751	801,303	129.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DD R108		563,138	798,696	162.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DE R109		561,045	796,731	122.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DF R110		562,656	802,037	116.5	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DG R111		562,571	801,882	121.4	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DH R112		563,920	801,611	126.9	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DI R113		563,750	798,122	125.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DJ R114		561,097	796,740	124.3	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DK R115		563,876	798,028	120.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DL R116		564,252	799,453	127.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DM R117		560,784	797,087	137.6	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DN R118		560,915	801,223	134.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DO R119		562,497	801,904	120.2	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DP R120		562,815	799,207	158.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DQ R121		562,748	799,164	156.7	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DR R122		564,073	799,121	120.1	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DS R123		564,026	799,337	133.1	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DT R124		564,291	800,950	130.8	1.5	1.5	1.0	90.0	"Green house mode"	2.5
DU R125		563,819	801,293	146.1	1.5	1.5	1.0	90.0	"Green house mode"	2.5

Calculation Results

Shadow receptor

Shadow receptor		Shadow, worst case		Shadow, expected values	
No.	Name	Shadow hours per year [h/year]	Shadow days per year [days/year]	Max shadow hours per day [h/day]	Shadow hours per year [h/year]
A	R001	23:20	68	0:39	4:12
B	R002	9:51	33	0:27	1:34
C	R003	13:57	58	0:27	2:15
D	R004	54:08	139	0:46	9:54
E	R005	13:33	42	0:29	1:47
F	R006	0:00	0	0:00	0:00
G	R007	0:00	0	0:00	0:00
H	R008	0:00	0	0:00	0:00
I	R009	0:00	0	0:00	0:00
J	R010	8:44	32	0:26	1:25
K	R011	30:41	68	0:42	4:02
L	R012	22:30	108	0:23	3:53

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SHADOW - Main Result

Calculation: Cumulative Shadow Flicker Predictions

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No.	Name	Shadow, worst case		Shadow, expected values	
		Shadow hours per year [h/year]	Shadow days per year [days/year]	Max shadow hours per day [h/day]	Shadow hours per year [h/year]
M R013		33:24	106	0:28	3:48
N R014		39:26	95	0:34	7:20
O R015		0:00	0	0:00	0:00
P R016		0:00	0	0:00	0:00
Q R017		20:42	50	0:35	3:42
R R018		0:00	0	0:00	0:00
S R019		53:28	159	0:38	9:53
T R020		18:06	70	0:28	3:02
U R021		0:00	0	0:00	0:00
V R022		0:00	0	0:00	0:00
W R023		0:00	0	0:00	0:00
X R024		7:09	32	0:22	1:17
Y R025		0:00	0	0:00	0:00
Z R026		17:18	57	0:28	3:30
AA R027		89:43	234	0:45	15:28
AB R028		35:33	70	0:47	4:43
AC R029		44:38	128	0:38	6:56
AD R030		57:41	157	0:39	10:36
AE R031		4:33	24	0:19	0:42
AF R032		14:02	59	0:25	2:37
AG R033		0:00	0	0:00	0:00
AH R034		22:33	44	0:46	3:14
AI R035		131:11	288	0:51	19:27
AJ R036		0:00	0	0:00	0:00
AK R037		0:00	0	0:00	0:00
AL R038		12:47	50	0:22	2:13
AM R039		10:31	45	0:22	2:08
AN R040		4:49	25	0:18	0:51
AO R041		18:55	122	0:22	2:19
AP R042		18:29	52	0:30	3:30
AQ R043		9:44	65	0:18	1:44
AR R044		12:13	42	0:25	2:18
AS R045		0:00	0	0:00	0:00
AT R046		0:00	0	0:00	0:00
AU R047		76:27	165	0:51	14:22
AV R048		3:59	22	0:16	0:42
AW R049		0:00	0	0:00	0:00
AX R050		0:00	0	0:00	0:00
AY R051		0:00	0	0:00	0:00
AZ R052		26:46	107	0:25	3:10
BA R053		22:50	114	0:20	3:58
BB R054		38:38	153	0:27	6:51
BC R055		4:08	36	0:12	0:42
BD R056		12:45	44	0:24	2:08
BE R057		0:00	0	0:00	0:00
BF R058		4:26	33	0:12	0:45
BG R059		5:55	28	0:21	1:03
BH R060		12:28	40	0:26	2:17
BI R061		0:00	0	0:00	0:00
BJ R062		59:50	149	0:41	10:47
BK R063		20:54	55	0:32	3:58
BL R064		0:00	0	0:00	0:00
BM R065		0:00	0	0:00	0:00
BN R066		0:00	0	0:00	0:00
BO R067		27:28	120	0:26	5:00
BP R068		32:32	88	0:41	4:15
BQ R069		57:12	198	0:34	9:58
BR R070		0:00	0	0:00	0:00
BS R071		12:36	79	0:26	2:19
BT R072		1:21	13	0:08	0:07
BU R073		4:43	36	0:11	0:48
BV R074		0:00	0	0:00	0:00
BW R075		0:00	0	0:00	0:00
BX R076		26:58	127	0:28	5:04

To be continued on next page...

Project:

Islandmore Wind Farm

Licensed user:

Galetech Energy Services

Clondargan, Stradone

IE-CO. CAVAN H12 NV06

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Joseph Buckley / joe.buckley@galetechenergy.com

Calculated:

21/01/2026 13:03/3.6.366

SHADOW - Main Result

Calculation: Cumulative Shadow Flicker Predictions

...continued from previous page

No.	Name	Shadow, worst case		Shadow, expected values	
		Shadow hours per year [h/year]	Shadow days per year [days/year]	Max shadow hours per day [h/day]	Shadow hours per year [h/year]
BY R077		0:00	0	0:00	0:00
BZ R078		46:26	176	0:34	7:39
CA R079		64:36	194	0:35	10:49
CB R080		36:46	149	0:27	6:49
CC R081		0:00	0	0:00	0:00
CD R082		55:15	142	0:46	8:06
CE R083		0:00	0	0:00	0:00
CF R084		0:00	0	0:00	0:00
CG R085		53:42	126	0:54	10:13
CH R086		5:32	25	0:21	0:52
CI R087		58:56	139	0:51	10:44
CJ R088		15:58	67	0:26	3:00
CK R089		11:13	42	0:23	2:10
CL R090		122:26	282	0:46	18:08
CM R091		59:26	155	0:43	9:34
CN R092		0:00	0	0:00	0:00
CO R093		0:00	0	0:00	0:00
CP R094		35:22	130	0:29	6:06
CQ R095		41:51	79	0:38	7:34
CR R096		18:23	116	0:21	2:12
CS R097		0:00	0	0:00	0:00
CT R098		31:11	123	0:27	5:36
CU R099		1:35	23	0:06	0:16
CV R100		8:46	35	0:19	0:49
CW R101		0:00	0	0:00	0:00
CX R102		83:25	135	1:09	13:01
CY R103		73:52	212	0:40	12:09
CZ R104		22:51	82	0:33	3:27
DA R105		33:06	126	0:26	5:59
DB R106		19:29	76	0:23	3:35
DC R107		20:16	56	0:34	2:42
DD R108		56:17	198	0:37	9:11
DE R109		0:00	0	0:00	0:00
DF R110		0:00	0	0:00	0:00
DG R111		0:00	0	0:00	0:00
DH R112		0:00	0	0:00	0:00
DI R113		14:02	64	0:24	2:38
DJ R114		0:00	0	0:00	0:00
DK R115		5:50	26	0:20	1:02
DL R116		31:57	138	0:34	5:58
DM R117		11:30	41	0:26	2:14
DN R118		27:32	64	0:40	3:39
DO R119		0:00	0	0:00	0:00
DP R120		100:02	256	0:46	15:29
DQ R121		97:26	243	0:52	14:30
DR R122		24:25	98	0:28	4:08
DS R123		35:17	131	0:27	6:21
DT R124		19:17	118	0:22	2:18
DU R125		22:31	84	0:26	2:50

Total amount of flickering on the shadow receptors caused by each WTG

No.	Name	Worst case	Expected
		[h/year]	[h/year]
1	T01	111:08	17:15
2	T02	82:15	12:30
3	T03	118:34	18:35
4	T04	104:42	18:49
5	T05	149:43	25:01
6	T06	130:48	24:02
7	T07	218:58	37:28
8	T08	205:03	31:52
9	T09	166:16	22:37
10	T10	240:02	39:31

To be continued on next page...

SHADOW - Main Result

Calculation: Cumulative Shadow Flicker Predictions

...continued from previous page

No.	Name	Worst case [h/year]	Expected [h/year]
11	Largan Hill T01	50:54	9:08
12	Largan Hill T02	48:43	8:24
13	Largan Hill T03	34:30	6:06
14	Largan Hill T04	17:46	3:04
15	Largan Hill T05	5:08	0:55
16	Largan Hill T06	4:47	0:41
17	Largan Hill T07	4:42	0:36
18	Largan Hill T08	40:14	6:30
19	Largan Hill T09	55:25	10:12

Total times in Receptor wise and WTG wise tables can differ, as a WTG can lead to flicker at 2 or more receptors simultaneously and/or receptors may receive flicker from 2 or more WTGs simultaneously.

The calculation of the total expected values for a given receptor assumes a weighted average directional reduction for all WTGs contributing to shadow flicker within the same day. In the case where shadow flicker from different WTGs is not concurrent within the day, the total expected time at a given receptor may deviate marginally from the individual flicker time caused by each turbine separately.



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