



Attachment 15

**Final Shadow Flicker Report for the GE 6.1-158
Turbine (51 locations)**

Shadow Flicker Report

Coles Wind Project

Coles County, Illinois

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1.0 PROJECT OVERVIEW

Coles Wind, LLC (Coles or the Applicant), an indirect subsidiary of Apex Clean Energy Holdings, LLC (Apex), is constructing a wind energy facility including 51 turbines known as the Coles Wind Project (Project) in Coles County, Illinois (see Figure 1). This report provides an assessment of the potential shadow flicker that could be experienced at participating and non-participating residences and occupied community buildings located around all 51 proposed turbines.

The Project will utilize the GE 158 turbine. Each wind turbine consists of three major mechanical components: the tower, nacelle, and rotor. For the GE 158, the anticipated tower height or “hub height” (height from foundation to the center of the rotor) at each turbine is approximately 117 meters (384 feet) and the rotor diameter is 158 meters (518 feet), resulting in a total maximum height of 196 meters (643 feet). The Project turbine layout is depicted in Figure 2.

The Project is located within Coles County, Illinois, approximately 5 miles north of Charleston and 30 miles south of the City of Champaign. Elevations in the area range from approximately 585 feet above mean sea level (amsl) to 710 feet amsl. Land cover within the Project area is dominated by active agriculture, with farms and single-family residences generally occurring along the road frontage.

2.0 PROJECT UPDATES

EDR completed a Shadow Flicker Report in December 2024 (2024 Report) that was included in the Coles Wind, LLC Special Use Permit Application for the Project. Coles County approved the Special Use Permit for the Project on July 1, 2025. The 2024 Report included shadow flicker modeling for 62 turbine locations and two turbine models. EDR is providing this updated and simplified shadow flicker report (2025 Report) that reflects the 51 turbine locations that will be built with the GE 158 turbine model. Since the 2024 Report, the Project has dropped eleven (11) turbine locations from consideration, identified the 51 turbine locations to be constructed, and there have been two minor shifts to turbines (Turbines 39a and 47a both shifted 59 and 65 feet respectively). In the body of this 2025 Report, EDR includes the results of the shadow flicker modeling for the 51 turbine locations to be constructed using the GE 158 turbine model. All turbines are sited in compliance with the Coles County Amended Ordinance: Standards for Wind Energy Conversion Systems Over 500 kW (May 2023). This 2025 report includes modeling results for all 51 turbines demonstrating all turbines are sited in compliance with the Coles County Ordinance.

3.0 INTRODUCTION

Shadow flicker refers to the moving shadows that an operating wind turbine casts at times of the day when the turbine rotor is between the sun and a structure’s position. Shadow flicker is most pronounced in northern latitudes during winter months because of the lower angle of the sun in the winter sky. However, it is possible to encounter shadow flicker anywhere for brief periods after sunrise and before sunset (U.S. Department of the Interior, 2005). During intervals of sunshine, wind turbine generators will cast a shadow on surrounding areas as the rotor blades pass in front of the sun, and if these moving shadows pass over a

window they can cause a flickering effect. Shadow flicker does not occur when fog or clouds obscure the sun, or when turbines are not operating.

The distance between a wind turbine and a structure (residence or occupied community building) affects the intensity of the shadows cast by the blades, and therefore the intensity of flickering. Shadows cast close to a turbine will be more intense, distinct, and focused. This is because a greater proportion of the sun's disc is intermittently blocked by the turbine (BERR, 2009). Obstacles such as terrain, vegetation, and/or buildings occurring between structures and wind turbines may significantly reduce or eliminate shadow-flicker effects. At distances beyond roughly 10 rotor diameters shadow-flicker effects are generally considered negligible (BERR, 2009; DECC, 2011; DOER, 2011).

The location and duration of shadow flicker can be predicted using computer modeling programs and input data regarding turbine characteristics and weather conditions. An "expected case" shadow flicker scenario is presented in this report based on a combination of real case data and conservative assumptions. The expected case aspects include sunshine frequency weather data (inclusion of percentage of monthly sunshine) and turbine rotor position (on-site wind direction data), while conservatively assumes that wind conditions allow continuous turbine operation. In addition, sunlight intensity and duration vary daily and seasonally, and obstacles that block shadows (terrain, vegetation, and buildings) exist in the landscape; these factors are not considered in the modeling, adding additional conservative measures.

4.0 METHODS

4.1 Shadow Flicker Analysis

This shadow flicker analysis evaluated the potential impact of 51 wind turbines. For consistency and comparison between the 2024 Report that was included with the Coles Wind, LLC Special Use Permit Application and this updated and simplified Shadow Flicker Report for the Building Permit Submittal, this analysis used the same 198 primary structures. Coles Wind has selected the GE 158 with a maximum distance of potential effect of 1,580 meters (10 rotor diameters based on the GE 158 rotor diameter).

The shadow flicker analysis for the proposed Project used *WindPRO 4.1* software and associated Shadow module. *WindPRO* is a widely accepted modeling software package developed specifically for the design and evaluation of wind power projects. Input variables and assumptions used for shadow flicker modeling calculations for the proposed Project include:

- The latitude and longitude coordinates of 51 wind turbine sites (provided by the Applicant).
- The latitude and longitude coordinates of 198 receptors including participating residences, non-participating residences, and occupied community buildings located within the vicinity of the proposed turbines (within one mile of the Project Area; provided by the Applicant).
- USGS DEM Elevation Data.
- The rotor diameter and hub height both turbine models under consideration.
- Annual wind rose data (provided by the Applicant), which is depicted in Table A1 of Attachment A (to determine the approximate directional frequency of rotor orientation throughout the year).

- To account for the occurrence of cloudy conditions, the average monthly percent of possible sunshine for the nearest National Oceanic and Atmospheric Administration (NOAA) weather station in Springfield, Illinois was used. Data were obtained from NOAA's "Comparative Climatic Data for the United States through 2018" (see Table A2 of Attachment A) (<http://www.ncdc.noaa.gov>).
- No allowance was made for wind being below or above generation speeds. Blades are assumed to be moving during all daylight hours when the sun's elevation is more than 3 degrees above the horizon. Shadow flicker is generally considered imperceptible when the sun is less than 3 degrees above the horizon (due to the scattering effect of the atmosphere on low angle sunlight) (States Committee for Pollution Control, 2002).

4.2 Shadow Flicker Threshold

The Coles County Amended Ordinance: Standards for Wind Energy Operation Systems Over 500 kW (May 2023) Operation, Section D states, "The Applicant shall appropriately demonstrate to the County Board through industry standard modeling that no occupied community building or non-participating residence will experience an expected duration of 30 hours or more per year." Accordingly, a threshold of 30 shadow flicker hours per year was applied to the analysis of the Project to identify any non-participating residence or occupied community building not in compliance with this threshold. Furthermore, Special Use Permit Application Section B.9 indicates waivers from shadow flicker mitigation requirements "must bear a file stamp from the County Recorder of Deeds Office confirming that the waiver was recorded against title to the affected real property" for those non-participating residences or occupied community buildings that exceed 30 hours per year.

5.0 RESULTS

Output from the model includes the following information:

- Calculated shadow-flicker time (total hours per year when shadow flicker is expected) at each of the 198 residences and occupied community buildings.
- Shadow isolines, which are used to create maps showing turbine locations, receptors, and projected shadow-flicker duration (hours per year) without taking into consideration the effect of screening provided by vegetation and structures (see Figure 3).

These data are presented in the tables included in Attachment B.

A summary of the projected shadow flicker at each of the receptors is presented in Table 2 below.

Table 1. Summary of Expected Shadow Flicker

Hours/Year	Number of Receptors			
	Non-Participating Residence	Participating Residence	Occupied Community Building	Total
0	86	15	1	102
0 – 1	0	0	0	0
1 – 10	46	10	1	57
10 – 20	17	2	0	19
20 – 30	14	4	0	18
Over 30	0	2	0	2
Max Hours/Year	27:09	35:53	5:53	--

As these results indicate, all non-participating residences and occupied community buildings are modeled to receive less than 30 hours of shadow flicker per year. At most receptor locations, shadow flicker will occur primarily in the early morning or late afternoon.

There are two participating residences modeled over 30 hours per year (RE00121 and RE00013). For these participating landowners, both have signed a waiver of the shadow flicker mitigation required by the Ordinance; these waivers have been filed with the County Recorder of Deeds Office against title to the affected real property.

Attachment B provides the results of the predicted shadow flicker at each receptor. The times of day and duration of shadow flicker experienced by each structure will vary throughout the calendar year based on the position of the sun in the sky and the direction of prevailing winds.

6.0 DISCUSSION

As outlined above, results of the shadow flicker analysis for the Project indicate that no non-participating residence or occupied community building are modeled to receive over 30 hours of shadow flicker per year.

In addition, the shadow flicker calculations presented herein do not take into account the actual location and orientation of windows, or the screening effects associated with existing, site-specific conditions and obstacles such as trees (i.e., does not take into account the results of a viewshed analysis) and/or buildings. Further, this analysis assumes turbine rotors are continuously in motion and that each receptor location is occupied year-round.

Given these assumptions, the predicted shadow-flicker frequency represents a conservative scenario, and almost certainly overstates the actual frequency of shadow flicker that would be experienced at any given receptor location. In addition, many of the modeled shadow flicker hours are expected to be low intensity because they would occur during the early morning or late afternoon hours when the sun is low in the sky. As the sun sinks too low on the horizon and the distance to the sun becomes too long, the shadow dissipates before it reaches the ground (or the receptor) (EMD, 2021).

7.0 CONCLUSIONS

The WindPRO analysis indicates no non-participating residence or occupied community building will receive more than 30 hours of shadow flicker per year. For those two participating residences modeled over 30 hours per year, those landowners have signed a shadow flicker mitigation waiver recorded with the County. Therefore, all turbines are sited in compliance with the Coles County Wind Ordinance in regards to shadow flicker.

8.0 REFERENCES

Business Enterprise & Regulatory Reform (BERR). 2009. *Onshore Wind: Shadow Flicker* [website]. Available at:

<http://webarchive.nationalarchives.gov.uk/20081013085503/http://www.berr.gov.uk/whatwedo/energy/sources/renewables/planning/onshore-wind/shadow-flicker/page18736.html> (Accessed July 2022).

Department of Energy and Climate Change (DECC). 2011. *Update of UK Shadow Flicker Evidence Base: Final Report*. Parsons Brinckerhoff, London, UK, p. 5.

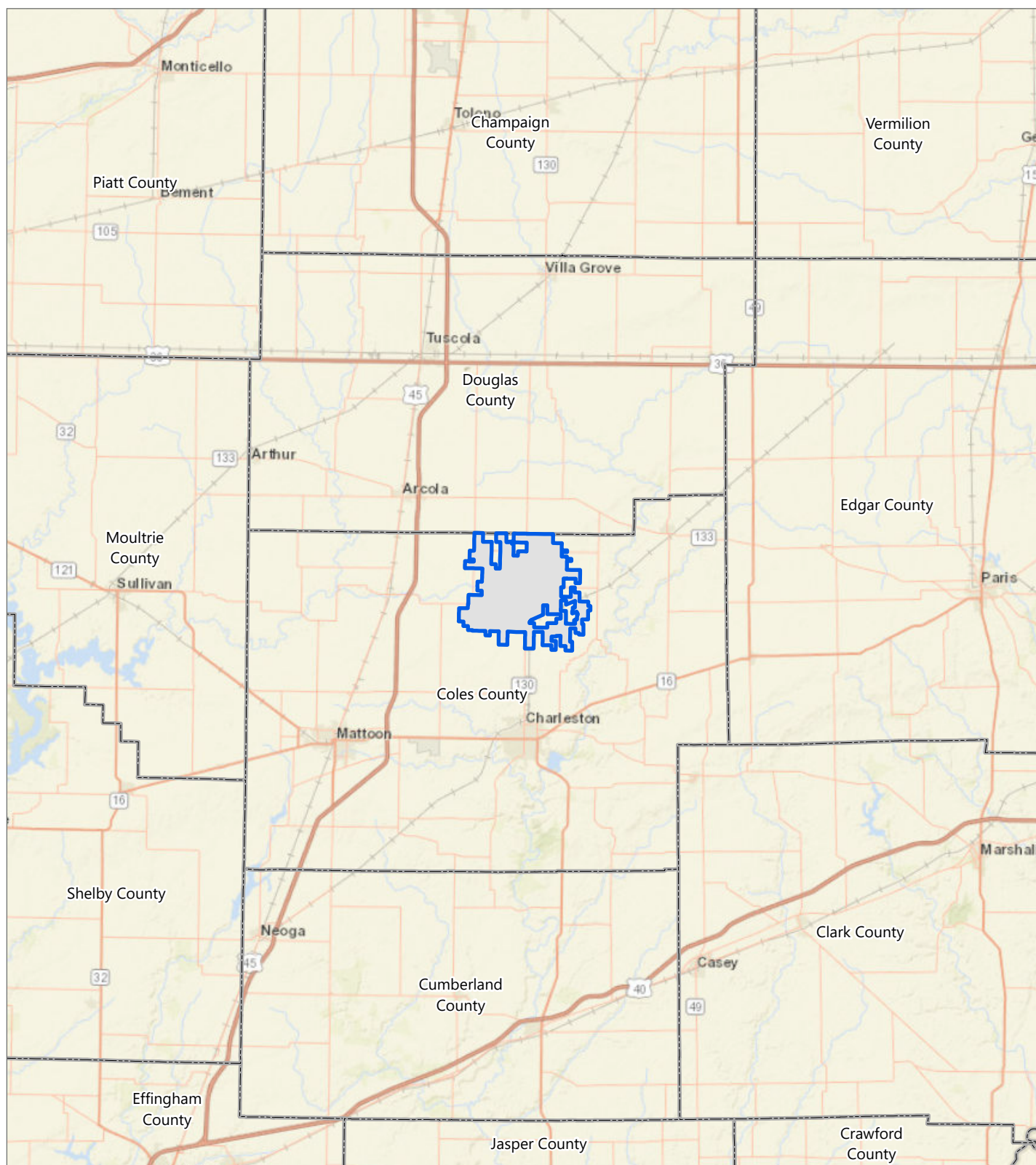
Massachusetts Department of Energy Resources (DOER). 2011. Model Amendment to a Zoning Ordinance or By-law: Allowing Conditional Use of Wind Energy Facilities. Available at: <https://www.mass.gov/doc/model-allow-wind-smallpdf/download> (Accessed July 2022).

EMD. 2021. *WindPRO 3.5 User Manual*. Available at: <http://help.emd.dk/knowledgebase/> (Accessed July 2022).

States Committee for Pollution Control – Nordrhein-Westfalen, 2002. Notes on the Identification and Evaluation of the Optical Emissions of Wind Turbines. Available at: http://www.umwelt.sachsen.de/umwelt/download/laerm_licht_mobilfunk/WEA-Schattenwurf-Hinweise_LAI.pdf (Accessed July 2022)

FIGURES

Figure 1. Regional Project Location



Coles Wind Project

Coles County, Illinois

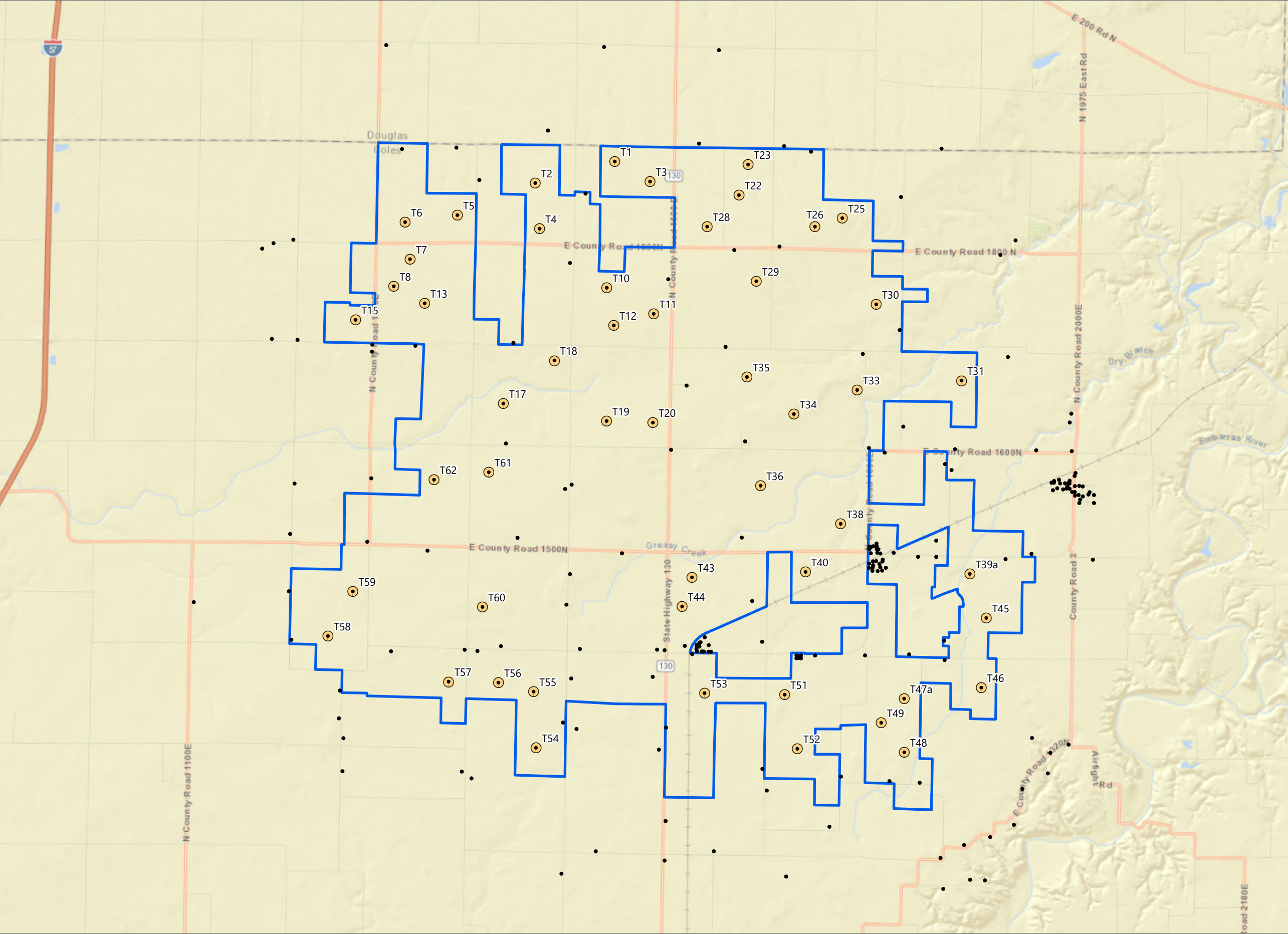
Shadow Flicker Analysis

 Project Boundary



0 2.5 5 10
Miles

Figure 2. Project Layout



Coles Wind Project

Coles County, Illinois

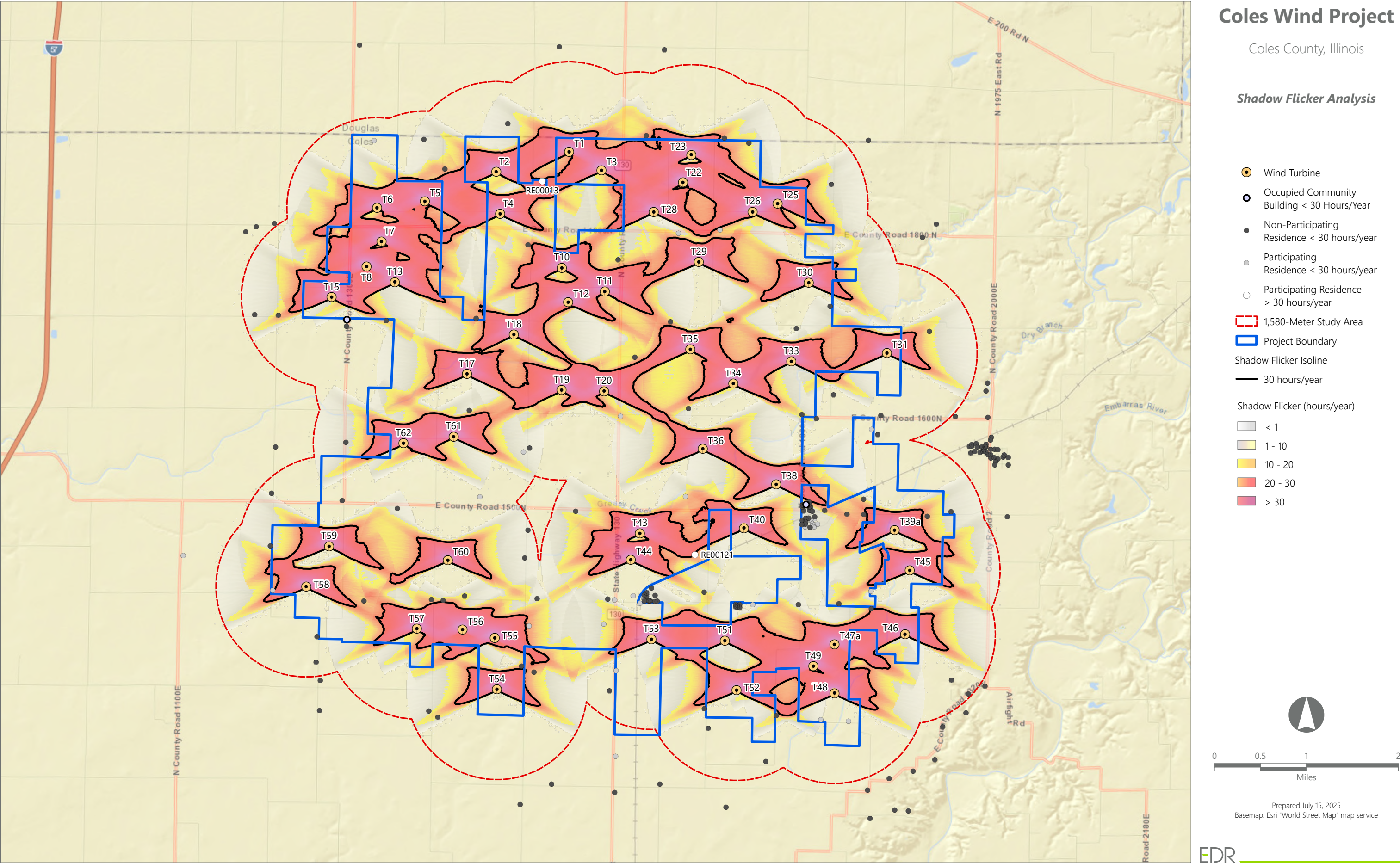
Shadow Flicker Analysis

- Receptor
- Wind Turbine
- ▭ Project Boundary



Prepared July 14, 2025
Basemap: Esri "World Street Map" map service

Figure 3. Projected Shadow Flicker



ATTACHMENT A
Windrose and Sunshine Data

Table A1. Wind Rose Data

SECTOR	N	NNE	NE	ENE	E	ESE	SE	SSE
Frequency	3.652	4.009	4.730	4.969	3.961	4.077	5.175	7.358
Hours of Operation	320	351	414	435	347	357	453	645

SECTOR	S	SSW	SW	WSW	W	WNW	NW	NNW
Frequency	12.161	10.280	6.302	5.410	6.610	8.298	7.553	5.79
Hours of Operation	1,065	901	552	474	579	727	662	507

Source: Wind rose data provided by Apex Clean Energy, LLC

Table A2. Sunshine Probability Data

Month	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Sunshine Probability ²	0.50	0.53	0.51	0.54	0.61	0.68	0.71	0.67	0.66	0.61	0.45	0.40

Source: NOAA Comparative Climatic Data for the United States through 2018 – Springfield, Illinois. Defined by NOAA as the total time that sunshine reaches the surface of the earth, expressed as the percentage of the maximum amount possible from sunrise to sunset with clear sky conditions.

ATTACHMENT B

Tabular Shadow Flicker Results

Receptor ID	Receptor Status	X Coordinate	Y Coordinate	Predicted Annual Shadow Flicker (hh:mm/year)
RE00001	Non-Participating Residence	397903	4391423	0:00
RE00002	Non-Participating Residence	394405	4391453	0:00
RE00003	Non-Participating Residence	399746	4391372	0:00
RE00004	Non-Participating Residence	397002	4390082	6:11
RE00005	Non-Participating Residence	399427	4389872	26:16
RE00006	Non-Participating Residence	400792	4389831	21:20
RE00007	Non-Participating Residence	403319	4389790	0:00
RE00008	Non-Participating Residence	401224	4389743	13:02
RE00009	Non-Participating Residence	395532	4389807	4:08
RE00010	Participating Residence	394659	4389784	0:00
RE00011	Non-Participating Residence	395901	4389288	21:08
RE00012	Non-Participating Residence	402668	4389014	8:12
RE00013	Participating Residence	397605	4389070	35:53
RE00014	Non-Participating Residence	404507	4388318	0:00
RE00015	Participating Residence	400718	4388219	21:15
RE00016	Non-Participating Residence	392915	4388328	0:00
RE00017	Non-Participating Residence	392597	4388273	0:00
RE00018	Participating Residence	399992	4388162	8:49
RE00019	Non-Participating Residence	404265	4388084	0:00
RE00020	Non-Participating Residence	392415	4388185	0:00
RE00021	Non-Participating Residence	397355	4387956	25:15
RE00022	Non-Participating Residence	398933	4387694	13:43
RE00023	Non-Participating Residence	402647	4386878	4:46
RE00024	Non-Participating Residence	392571	4386737	4:29
RE00025	Non-Participating Residence	396447	4386671	25:40
RE00026	Non-Participating Residence	392982	4386722	20:00
RE00027	Non-Participating Residence	399852	4386608	20:20
RE00028	Non-Participating Residence	394874	4386627	19:44
RE00029	Non-Participating Residence	402056	4386494	0:00
RE00030	Non-Participating Residence	404385	4386445	13:03
RE00031	Non-Participating Residence	394176	4386532	0:00
RE00032	Non-Participating Residence	399227	4385987	13:53
RE00033	Non-Participating Residence	405403	4385536	0:00
RE00034	Non-Participating Residence	405376	4385395	0:00
RE00035	Non-Participating Residence	402705	4385328	0:00
RE00036	Non-Participating Residence	400166	4385091	7:46
RE00037	Non-Participating Residence	404839	4384948	0:00
RE00038	Non-Participating Residence	403535	4384965	0:00
RE00039	Non-Participating Residence	402153	4384985	13:47
RE00040	Non-Participating Residence	405410	4384935	0:00

Receptor ID	Receptor Status	X Coordinate	Y Coordinate	Predicted Annual Shadow Flicker (hh:mm/year)
RE00041	Non-Participating Residence	396327	4385058	6:04
RE00042	Non-Participating Residence	402407	4384911	0:00
RE00043	Participating Residence	398977	4384956	20:02
RE00044	Participating Residence	403374	4384727	0:00
RE00045	Non-Participating Residence	403480	4384631	0:00
RE00046	Non-Participating Residence	405470	4384583	0:00
RE00047	Non-Participating Residence	405455	4384536	0:00
RE00048	Non-Participating Residence	405205	4384475	0:00
RE00049	Non-Participating Residence	405376	4384461	0:00
RE00050	Non-Participating Residence	405126	4384455	0:00
RE00051	Non-Participating Residence	405360	4384426	0:00
RE00052	Non-Participating Residence	405122	4384428	0:00
RE00053	Non-Participating Residence	405084	4384427	0:00
RE00054	Non-Participating Residence	405301	4384418	0:00
RE00055	Non-Participating Residence	405374	4384415	0:00
RE00056	Non-Participating Residence	405222	4384416	0:00
RE00057	Non-Participating Residence	405529	4384377	0:00
RE00058	Non-Participating Residence	405458	4384373	0:00
RE00059	Non-Participating Residence	405586	4384368	0:00
RE00060	Non-Participating Residence	405338	4384369	0:00
RE00061	Non-Participating Residence	405176	4384338	0:00
RE00062	Non-Participating Residence	405325	4384333	0:00
RE00063	Non-Participating Residence	394166	4384498	7:31
RE00064	Non-Participating Residence	405375	4384330	0:00
RE00065	Non-Participating Residence	405271	4384320	0:00
RE00066	Non-Participating Residence	405107	4384307	0:00
RE00067	Non-Participating Residence	405415	4384279	0:00
RE00068	Non-Participating Residence	405695	4384275	0:00
RE00069	Non-Participating Residence	405458	4384278	0:00
RE00070	Non-Participating Residence	397382	4384397	4:06
RE00071	Non-Participating Residence	405677	4384238	0:00
RE00072	Non-Participating Residence	405766	4384230	0:00
RE00073	Non-Participating Residence	405518	4384231	0:00
RE00074	Non-Participating Residence	392935	4384414	0:00
RE00075	Non-Participating Residence	405460	4384220	0:00
RE00076	Non-Participating Residence	405586	4384208	0:00
RE00077	Participating Residence	397277	4384327	5:28
RE00078	Non-Participating Residence	405544	4384157	0:00
RE00079	Non-Participating Residence	405530	4384101	0:00
RE00080	Non-Participating Residence	405767	4384101	0:00

Receptor ID	Receptor Status	X Coordinate	Y Coordinate	Predicted Annual Shadow Flicker (hh:mm/year)
RE00081	Participating Residence	400113	4383547	14:54
RE00082	Non-Participating Residence	403233	4383498	14:30
RE00083	Non-Participating Residence	392864	4383605	0:00
RE00084	Participating Residence	396513	4383543	0:00
RE00085	Non-Participating Residence	402276	4383452	23:36
RE00086	Non-Participating Residence	402277	4383411	10:24
RE00087	Non-Participating Residence	402161	4383400	6:44
RE00088	Non-Participating Residence	402192	4383398	6:19
RE00089	Non-Participating Residence	402177	4383398	6:29
RE00090	Non-Participating Residence	402161	4383365	6:53
RE00091	Non-Participating Residence	402278	4383362	8:04
RE00092	Non-Participating Residence	402305	4383360	7:56
RE00093	Non-Participating Residence	394101	4383480	0:00
RE00094	Non-Participating Residence	404763	4383286	7:25
RE00095	Non-Participating Residence	402551	4383303	17:33
RE00096	Non-Participating Residence	402288	4383304	7:56
RE00097	Non-Participating Residence	402336	4383292	7:39
RE00098	Non-Participating Residence	402184	4383295	6:30
RE00099	Non-Participating Residence	403234	4383236	24:42
RE00100	Non-Participating Residence	402942	4383239	22:25
RE00101	Non-Participating Residence	405748	4383192	0:00
RE00102	Non-Participating Residence	398190	4383294	7:17
RE00103	Non-Participating Residence	404347	4383201	21:43
RE00104	Non-Participating Residence	395068	4383338	4:46
RE00105	Non-Participating Residence	402375	4383194	7:29
RE00106	Non-Participating Residence	402270	4383170	7:58
RE00107	Participating Residence	402370	4383164	7:30
RE00108	Non-Participating Residence	402219	4383165	8:20
RE00109	Non-Participating Residence	402159	4383130	6:44
RE00110	Participating Residence	402322	4383121	7:44
RE00111	Non-Participating Residence	402221	4383103	8:23
RE00112	Participating Residence	402336	4383071	7:47
RE00113	Participating Residence	402425	4383063	7:37
RE00114	Non-Participating Residence	402213	4383063	8:31
RE00115	Non-Participating Residence	402153	4383058	7:01
RE00116	Participating Residence	402366	4383017	7:52
RE00117	Participating Residence	402209	4383014	8:48
RE00118	Non-Participating Residence	402294	4383009	8:10
RE00119	Non-Participating Residence	397355	4382959	3:06
RE00120	Non-Participating Residence	392843	4382684	7:15

Receptor ID	Receptor Status	X Coordinate	Y Coordinate	Predicted Annual Shadow Flicker (hh:mm/year)
RE00121	Participating Residence	400280	4382529	30:43
RE00122	Non-Participating Residence	397298	4382470	3:34
RE00123	Participating Residence	391317	4382510	0:00
RE00124	Participating Residence	403361	4381892	8:50
RE00125	Non-Participating Residence	399518	4381947	0:00
RE00126	Non-Participating Residence	400439	4381875	11:40
RE00127	Participating Residence	399452	4381865	0:00
RE00128	Non-Participating Residence	399433	4381860	0:00
RE00129	Non-Participating Residence	399393	4381827	0:00
RE00130	Participating Residence	399427	4381823	0:00
RE00131	Non-Participating Residence	399582	4381819	6:08
RE00132	Participating Residence	392883	4381906	27:51
RE00133	Participating Residence	399198	4381809	0:00
RE00134	Non-Participating Residence	399433	4381797	3:23
RE00135	Participating Residence	399388	4381792	0:00
RE00136	Non-Participating Residence	396246	4381804	12:08
RE00137	Participating Residence	399385	4381756	0:00
RE00138	Non-Participating Residence	398753	4381748	4:52
RE00139	Participating Residence	398874	4381739	0:00
RE00140	Non-Participating Residence	397514	4381759	5:35
RE00141	Non-Participating Residence	399483	4381717	3:32
RE00142	Non-Participating Residence	402799	4381671	14:29
RE00143	Non-Participating Residence	399578	4381714	4:31
RE00144	Non-Participating Residence	399395	4381719	2:55
RE00145	Non-Participating Residence	399469	4381717	3:26
RE00146	Non-Participating Residence	399618	4381715	5:04
RE00147	Non-Participating Residence	399504	4381716	3:43
RE00148	Non-Participating Residence	402090	4381655	3:37
RE00149	Non-Participating Residence	395664	4381746	18:42
RE00150	Participating Residence	401290	4381655	0:00
RE00151	Non-Participating Residence	401063	4381654	0:00
RE00152	Non-Participating Residence	400991	4381655	0:00
RE00153	Participating Residence	399316	4381676	0:00
RE00154	Non-Participating Residence	395870	4381726	20:21
RE00155	Non-Participating Residence	401020	4381645	0:00
RE00156	Non-Participating Residence	394483	4381721	17:44
RE00157	Non-Participating Residence	403368	4381581	27:09
RE00158	Non-Participating Residence	401020	4381615	0:00
RE00159	Non-Participating Residence	401063	4381609	0:00
RE00160	Non-Participating Residence	400990	4381610	2:46

Receptor ID	Receptor Status	X Coordinate	Y Coordinate	Predicted Annual Shadow Flicker (hh:mm/year)
RE00161	Participating Residence	398684	4381311	10:57
RE00162	Participating Residence	397375	4381284	25:03
RE00163	Non-Participating Residence	393663	4381091	0:00
RE00164	Non-Participating Residence	393646	4380645	0:00
RE00165	Non-Participating Residence	397243	4380578	22:56
RE00166	Participating Residence	398898	4380496	0:00
RE00167	Non-Participating Residence	397460	4380474	18:43
RE00168	Non-Participating Residence	404770	4380330	0:00
RE00169	Non-Participating Residence	405358	4380224	0:00
RE00170	Non-Participating Residence	393719	4380326	0:00
RE00171	Non-Participating Residence	405066	4380092	0:00
RE00172	Non-Participating Residence	398782	4380143	0:00
RE00173	Non-Participating Residence	400444	4379833	3:09
RE00174	Non-Participating Residence	405026	4379761	0:00
RE00175	Non-Participating Residence	401705	4379711	17:50
RE00176	Non-Participating Residence	395619	4379791	8:09
RE00177	Non-Participating Residence	393704	4379796	0:00
RE00178	Participating Residence	402483	4379636	4:16
RE00179	Participating Residence	402968	4379612	0:00
RE00180	Non-Participating Residence	395775	4379681	11:45
RE00181	Non-Participating Residence	404617	4379511	0:00
RE00182	Non-Participating Residence	400514	4379487	0:00
RE00183	Non-Participating Residence	404481	4378936	0:00
RE00184	Participating Residence	398890	4378997	0:00
RE00185	Non-Participating Residence	401520	4378905	0:00
RE00186	Non-Participating Residence	404100	4378739	0:00
RE00187	Non-Participating Residence	403681	4378611	0:00
RE00188	Non-Participating Residence	399664	4378511	0:00
RE00189	Non-Participating Residence	397769	4378510	0:00
RE00190	Non-Participating Residence	403303	4378403	0:00
RE00191	Non-Participating Residence	398874	4378362	0:00
RE00192	Non-Participating Residence	400825	4378105	0:00
RE00193	Non-Participating Residence	403778	4378054	0:00
RE00194	Non-Participating Residence	397218	4378151	0:00
RE00195	Non-Participating Residence	404015	4378044	0:00
RE00196	Non-Participating Residence	403347	4377907	0:00
CB00197	Occupied Community Building	394183	4386647	0:00
CB00198	Occupied Community Building	402225	4383408	5:53