



**Mahomet Solar Project**  
**4.99 MW AC Community Solar Project**  
**Champaign County, Illinois**  
**Special Use Permit Application**  
**Submitted January 2025**

## **Project Introduction:**

Enclosed is Mahomet IL Solar 1, LLC's Special Use Permit application under the Champaign County Zoning Ordinance Section 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM County BOARD SPECIAL USE Permit Zoning Ordinance Resolution NO. 971 last revised February 23, 2023. The Applicant, Mahomet IL Solar 1, LLC is a PV Solar Farm as defined under the Champaign County Zoning Ordinance. The Applicant's non-entity, project name is "Mahomet Solar".

Mahomet Solar is a proposal to develop a 4.99 MW AC / 7.4 MW DC community solar project on an approximate 36-acre area of land located on County Road 125 E, in Mahomet, Illinois, 61853 also known as the "Subject Property". Parcel ID is 15-13-17-100-012 which is zoned AG-2 Agriculture as confirmed with Charlie Campo via email November 25, 2024.

The Applicant's environmental due diligence included studies such as a Phase 1 Environmental Site Assessment found no recognized environmental conditions, historic recognized environmental conditions, or controlled recognized environmental conditions for the Subject Property.

Illinois Department of Natural Resources (IDNR) Ecological Compliance Assessment Tool (EcoCAT) found the Illinois Natural Heritage Database contains four State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the Subject Property. The Indiana Bat, Northern long-eared Bat, Whooping Crane and Eastern Prairie Fringed Orchid. The EcoCAT information request and letter from the IDNR has concluded that adverse effects to protected species are unlikely.

United States Fish and Wildlife Services (USFWS) Information for Planning and Consulting (IPaC) environmental review determined no critical habitats were identified within or near the Subject Property.

Illinois State Historic Preservation Office (SHPO) found no known historic properties within the proposed Subject Property.

A Geotechnical Report and Drainage Tile Investigation have also been completed. The Drainage Tile Survey is included in the application, Exhibit K. CAB wiring will be utilized to



minimize any drainage tile impact and earthwork in general. The location of the agricultural drainage tile was surveyed prior to construction, and any impacts will be avoided to the greatest extent possible. Any impacts to the drainage tile incurred during construction will be repaired promptly, and the tile will be relocated if it conflicts with any major site features in accordance with County ordinance.

A Noise Study was completed and found that Mahomet Solar will be inaudible when the inverters are operational. Highway 150 will dominate any sounds from the solar project.

The Vegetation Management Plan includes five-foot-tall trees on the perimeter of the fence line.

Mahomet Solar will interconnect with Ameren and has a fully executed Interconnection Agreement dated February 5, 2024. The interconnection was collaboratively designed to minimize the impact on neighbors.

Contact information for Mahomet Solar is set forth in the attached application materials. Contact information for the landowner Greater Heritage Farms, LLC and their registered address is 2102 Windsor Place, Suite 1, Champaign, IL 61820.

Applicant has two waiver requests, to use a surety bond for decommissioning in-lieu of a letter of credit. The County Ordinance references a surety bond as acceptable security for residential or planned unit facilities and improvements. The State of IL Agriculture Impact Mitigation Agreement (AIMA) that Counties enforce identifies a surety bond as an accepted form of financial assurance for solar array deconstruction Surety Bond Advantages. Unlike a letter of credit, a surety bond provides an option for the surety to perform or complete the decommissioning obligation in the event of a default, rather than the County. A surety bond also provides an avenue for administering a claim or default if the asset owner is not responsive to an issue. Summit Ridge Energy, LLC's Certificate of Insurance is included as Exhibit L.

The second waiver request is for the access road width. The Mahomet Solar Project access road and starting point on the road have been designed based on feedback from Road Use Commissioner Chris. The 16' wide design was based on feedback from him and minimizing the

impact on the tenant farmer's farmland. Mahomet is requesting that this be accepted as the site still can provide a 40 foot turning radius for trucks and firetrucks.

Pursuant to the Champaign County Zoning Ordinance, Mahomet Solar respectfully requests that Champaign County Board approve the application for a Special Use Permit for the PV Solar Farm.

We look forward to presenting the application to Champaign County. Please contact me with any questions.



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## **SUMMARY OF APPLICATION**

The Applicant, Mahomet IL Solar 1, LLC, is seeking approval from Champaign County for a Special Use Permit for the construction and operation of a PV Solar Farm project on parcel 15-13-17-100-012 in Mahomet Village, Champaign County, Illinois (the "Project Parcel") under the Champaign County Zoning Ordinance Section 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM County BOARD SPECIAL USE Permit Zoning Ordinance Resolution NO. 971 last revised February 23, 2023. Pursuant to said Ordinance for Solar Energy Facilities, the Applicant requests a Special Use Permit for the construction, operation and maintenance of a PV Solar Farm. The Exhibits, Figures and information contained in this Application are estimates based on desktop and field analyses performed to date. They are subject to change based on final approved layout of the solar arrays and associated facilities and ultimate procurement of the PV Solar Farm equipment.

## **SOLAR PROJECT DESCRIPTION**

The Applicant is proposing a 4.99 MWAC / 7.4 MWDC community solar project located on an approximately 36-acre area of land in Mahomet Village, Champaign County, Illinois. Approximately 10,920 Hanwha Q.Pearl Duo XL-G12/BFG panels will be used which have an anti-glare finish. Siemens KACO BluePlanet 125-TL3-INT inverters are planned to be used. The panels are cleaned by natural precipitation so no daily or annual gallons of water will be used to clean the panels. In addition to providing a lower cost, clean, local solar facility to communities the PV Solar Farm will also provide significant tax revenue and economic stimulus to Champaign County. Another benefit may include native pollinator-friendly plantings that improve water quality and biodiversity, subject to a final Vegetation Management Plan. Site control for the PV Solar Farm has been secured through a Memorandum of Option between Greater Heritage Farms and SRE Solar Origination 2, LLC dated February 28, 2023 and was recorded in Champaign County April 8, 2024, as record #2024R00971. The useful life of the PV Solar Farm is expected to be approximately 40 years.

Under Illinois Public Act 102-0662, commonly known as the Climate and Equitable Jobs Act ("CEJA"), the State of Illinois committed funds and ordered the Illinois Power Agency to establish incentives for the creation of community solar projects. The Solar Project is intended to be a community solar project under CEJA, which would allow Ameren customers, including local Champaign County residential and commercial customers to subscribe to the PV SOLAR

FARM. The PV SOLAR FARM will support and further CEJA's goals increasing the adoption and availability of renewable energy to Illinois residents and businesses. In addition, the PV SOLAR FARM will contribute to Illinois 100% clean energy goal by 2050.

The PV SOLAR FARM will consist of equipment to generate electricity from solar energy, including rows of photovoltaic cell panels mounted on posts driven into the ground. The components of the PV SOLAR FARM will comply with the current edition of the National Electric Code and be UL listed or meet a comparable safety standard. The panels will be designed with an anti-reflective coating to minimize glare from the PV SOLAR FARM. The Applicant plans to install the panels in an east-west configuration on a single-axis tracker.

Transformers and other electrical equipment will be located on concrete pads. Project interconnection poles will convey electricity along utility-controlled interconnection poles to the Ameren owned electric distribution system. A chain link fence or agricultural-style fence will enclose all the panels and electrical equipment on site, which will be accessed via a locked gate as shown in the Site Plan.

The proposed site plan of the PV SOLAR FARM has been designed to maximize usable acreage while minimizing impacts on nearby landowners, wetlands and the environment. Pending permitting and other factors the PV SOLAR FARM could begin construction as early as November 2025 and achieve commercial operation in July 2026.

## **SUMMIT RIDGE ENERGY LLC**

Summit Ridge Energy LLC ("SRE") is the nation's leading commercial solar company, the largest commercial solar developer and owner operator in the State of Illinois. SRE is an acting long-term owner and operator of projects. SRE has more than 500 operating MWAC, providing solar power to 50,000 homes and businesses and a leading Owner-Operator for Community Solar in Illinois and beyond. The projects have employed more than 3,500 construction workers and provide solar power saving to more than 20,000 Illinois ratepayers. SRE brings together communities, organizations, and landowners to develop clean energy projects with strong local support and benefits. The SRE team takes great pride in ensuring the solar projects they build and operate engage the surrounding community, addressing all concerns from the public while providing lower cost clean local energy.

SRE prioritizes the selection of potential solar project sites by not only considering but addressing architectural and archaeological concerns, impacts to native and local vegetation and wildlife, protected lands/waterways, wetlands and floodplains, soils and erosion control and any other issues important to the local community. SRE implements best management practices that minimize and/or eliminate the impact of a solar site for the life of the project in accordance with all federal, state, and local regulations.

## **APPLICANT INFORMATION**

Mahomet IL Solar 1, LLC (a wholly owned subsidiary of Summit Ridge Energy, LLC)

Moira Cronin

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## *EXHIBIT A: Financials*

Based in Arlington, VA and Chicago, IL, SRE was founded in 2017 and quickly established itself as a best-in-class developer, owner, and operator of community solar projects in the United States. Aided by dedicated permanent financing funds totaling over \$1.6 billion, SRE has constructed 155 systems, with 44 projects in the construction phase and 111 projects completed, including both tracking and fixed tilt ground-mount, rooftop, and ballasted landfill systems across its active markets. SRE has 500 operating megawatts across the United States.

In May of 2019, SRE entered a joint venture agreement with Hannon Armstrong (NYSE: HASI), the first public company in the United States solely dedicated to investing in climate solutions. Concentrated on creating synergy and clear communication between the parties, SRE and HASI formed Summit Ridge Capital Holdings (SRCH), which builds SRE's solar energy systems to own and operate them throughout their useful life. SRCH secures financial participation - including tax equity, debt, construction financing, and provides asset management services. SRE serves as the joint venture manager of SRCH. In June of 2021, SRE announced its second joint venture with Osaka Gas USA Corporation (SREOG), a subsidiary of Osaka Gas Co., Ltd (TYO: 9532), a global leader in renewable investments. SRE has financed and served as the asset manager for all projects developed or acquired since 2019 through one of these two joint ventures. SRE's structure ensures that projects are developed and built with the mindset of a long-term owner-operator of solar projects.

Due to SRE's tremendous growth and success, the Company is continuously expanding its financing partnerships. As of November 2023, SRE secured an additional \$275M in financing facilities with an existing partnership with Mitsubishi UFJ Financial Group, Inc. (MUFG) to support the construction of 15 additional solar projects within Illinois and Virginia. This expansion added 45MWdc to an existing fleet of 250MWdc across the state of Illinois. Together these projects will provide bill credits to an additional 13,000 homes and businesses and deliver energy savings to low-income residents and commercial customers.

Summit Ridge maintains strong relationships and partnerships with its various financing partners. In Summer of 2022, SRE took on a strategic investment from Apollo Management Group in the amount of \$175MM. Other financial backing includes over \$1 billion in construction and development loans with Fundamental Renewables and a recently opened \$275 million development facility with MUFG. Tax equity partnerships have also been critical to our success. Our main partners have been Foss + Company, NTCIC, and 1st Source Bank. The Company has successfully worked with these various experienced financing partners to bring over 155 projects to either construction or full completion. Summit Ridge Energy is confident in its ability to continue securing capital into the foreseeable future as the Company's solar project pipeline continues to grow.

SRE maintains robust partnerships and in-house capabilities for residential and commercial offtake (subscriber) acquisition and ongoing management. Currently, over 30,000 subscribers have already joined the SRE family. SRE makes a clear commitment to further expanding national access to solar energy through a rapidly scaling development pipeline which is on track to offer over 50,000 more households and businesses renewable energy subscriptions by the end of 2024. Summit Ridge will continue to build on our past success in 2023, helping Illinois meet its clean energy goals.



Summit Ridge Energy's value proposition of working closely with the communities and local governments in which its solar projects operate sets it apart from other developers. At the forefront of our mission is the deliverance of community and environmental benefits for the greater good. Through the 60 plus projects completed within Illinois to date, 176MWdc of solar power have been added to the grid, which will reduce carbon emissions by 33,466 metric tons of carbon dioxide annually. Additionally, Summit Ridge prioritizes American jobs. In April 2023, SRE announced a 1.2 GW purchase from Qcells' manufacturing facility in Georgia, marking the largest domestic community solar purchase in US history. These modules will power more than 140,000 SRE subscribed homes and businesses. At SRE, we are dedicated to completing thorough environmental diligence on all the projects we develop in order to maintain and protect wildlife and greenspace, taking utmost care of the land we utilize and the communities in which we develop. We also strongly value those from whom we lease our land. The company's land leases provide our landowners with long-term revenue streams that diversify their income and hedge against volatile crop yields, helping to sustain family farms for future generations and bring revenue into their communities. SRE works to lead by example through its work by continuing to educate communities and corporations alike on the unique benefits of community solar. It remains the most efficient and scalable form of clean energy that directly lowers utility bills for American families while cutting emissions from the grid.

The following page outlines Summit Ridge Energy's extensive experience in Illinois.

	Name	Project Company	Address	City	County	MW	Status
1	2662 Freeport 1	2662 Freeport Solar 1, LLC	2662 IL Route 26N	Freeport	Stephenson	2.000	Operating
2	Rich Dev	42nd Road Solar, LLC	Intersection of N 42nd Rd and E 50th Rd	Mendota	La Salle	2.000	Operating
3	Briscoe 1A	7th Road Solar 1, LLC	Vermillion, La Salle County	Tonica	La Salle	2.000	Operating
4	Griggs	AES Griggs Solar, LLC	4948 N Rte 1-17	Momence	Kankakee	2.000	Operating
5	Blue Goose 1	Blue Goose Road Solar 1, LLC	12876 Blue Goose Road	Morrison	Whiteside	2.000	Operating
6	CED Beecher Sun	CED Beecher Sun Solar, LLC	44 East Corning Rd	Beecher	Will	2.000	Operating
7	CED Hilltop	CED Hilltop Solar, LLC	8326 Trask Bridge Road	Rockford	Winnebago	2.000	Operating
8	Peoria	CED Peoria Solar, LLC	9510 S Powell Road	Peoria	Peoria	2.000	Operating
9	CED Spring Creek	CED Spring Creek Solar, LLC	930 State Route 1	St Anne	Kankakee	2.000	Operating
10	Clendenin A	Clendenin A Community Solar, LLC	820 E Mine B Rd	Herrin	Williamson	2.000	Operating
11	Clinton 4	Clinton Solar 4 LLC	22850 Sand Ridge Road	Carlyle	Clinton	2.000	Operating
12	IGS East Central	IGS East Central, LLC	2600 East Road	Joliet	Will	2.000	Operating
13	Brewster CSS	IGS Stockton CS, LLC	300 West Railroad Avenue	Stockton	Jo Daviess	1.850	Operating
14	Fulton 1B	Illinois PV Fulton 1, LLC	2143 IL 116	Farmington	Fulton	2.000	Operating
15	Iroquois 1B	Iroquois Solar 1B, LLC	1910 County Rd 1980 E	Watseka	Iroquois	2.000	Operating
16	Kankakee 4	Kankakee Solar 4 LLC	2801 E Court Street	Kankakee	Kankakee	2.000	Operating
17	Keeversville	Keeversville Solar Energy Center LLC	34461 S Rt 53	Braidwood	Will	2.000	Operating
18	Keller	Keller Community Solar LLC	5944 Old Rt 13	Carterville	Williamson	0.650	Operating
19	Kent School Road 1	Kent School Road Solar 1, LLC	15047 W Kent School Rd	Kent	Stephenson	2.000	Operating
20	Kern A	Kern A Community Solar LLC	15015 State Highway 149	West Frankfort	Franklin	2.000	Operating
21	Lena	Lena Solar LLC	9998 N Cedarville Rd	Lena	Stephenson	1.980	Operating
22	Lukuc	Lukuc B Community Solar, LLC	3101 Big Buck Ln	Herrin	Williamson	2.000	Operating
23	Marlow	Marlow Solar, LLC	13028 County Road 2100	East Bluford	Jefferson	2.000	Operating
24	McDonough 1	McDonough Solar 1 LLC	2685 IL HWY 9	Blandinsville	McDonough	2.000	Operating
25	McDonough 1B	McDonough Solar 1B LLC	2685 IL HWY 9	Blandinsville	McDonough	2.000	Operating
26	Morgan 1	Morgan Solar 1, LLC	2068 Cemetery Rd	Meredosia	Morgan	2.000	Operating
27	Morgan 1B	Morgan Solar 1B, LLC	2069 Cemetery Rd	Meredosia	Morgan	2.000	Operating
28	Morgan 2	Morgan Solar 2 LLC	2009 Midway Road	Murrayville	Morgan	2.000	Operating
29	Morgan 4	Morgan Solar 4 LLC	629 State Hwy 967	Murrayville	Morgan	2.000	Operating
30	14th Rd E	N14 Road LaSalle Solar 2, LLC	N 14th Rd and E 21st St	Kernan	La Salle	2.000	Operating
31	14th Rd W	N14 Road LaSalle Solar, LLC	N 14th Rd and E 22nd St	Kernan	La Salle	2.000	Operating
32	Stella	Packard Solar One LLC	5456 11th Street	Rockford	Winnebago	0.900	Operating
33	Frieders	Pine Road Solar, LLC	14750 Pine Road	Sandwich	DeKalb	2.000	Operating
34	Schulte 2	Schulte 2 Community Solar, LLC	601 14th St	Lacon	Marshall	2.000	Operating
35	Calvert Speedway	Speedway Solar Energy Center LLC	19554 W Sharp Rd	Elwood	Will	2.000	Operating
36	Sullivan B	Sullivan B Community Solar LLC	1800 East University Drive	Macomb	McDonough	2.000	Operating
37	Lutz	SV CSG Gardner 1, LLC	506 South Carbon Hill Rd	Gardner	Grundy	2.000	Operating
38	Talty	SV CSG Kernan 1 LLC	N 14th Rd and E 21st St	Kernan	La Salle	2.000	Operating
39	Lily Lake	SV CSG Lily Lake 2 LLC	6N066 IL-47	Maple Park	Kane	2.000	Operating
40	Mt Morris 2	SV CSG Mt Morris 2 LLC	3620 North Mount Morris Road	Mount Morris	Ogle	2.000	Operating
41	Boigenzahn	Tower Road Solar, LLC	10480 Tower Road	Lee	DeKalb	2.000	Operating
42	Vermillion	Vermilion Solar 1, LLC	3811 E Main Street	Danville	Vermilion	2.000	Operating
43	Whiteside	Whiteside Solar 1, LLC	900 22nd Avenue	Fulton	Whiteside	2.000	Operating
44	Highland 1	Highland Solar 1, LLC	12085 Highland Road	Highland	Madison	2.000	Operating
45	Pearl Street	Pearl St Solar 1, LLC	21869 IL RTE 9	Tremont	Tazewell	2.000	Operating
46	Marine 1	Marine Solar 1, LLC	10205 State Route 143	Marine	Madison	2.000	Operating
47	Marine 2	Marine Solar 2, LLC	10205 State Route 143	Marine	Madison	2.000	Operating
48	Clark Solar 2	Clark Solar 2, LLC	17053 CR 3950E	San Jose	Mason	2.000	Operating
49	Schmidt Huser	Schmidt Huser Solar, LLC	16340 Springfield Rd	Pekin	Tazewell	1.500	Operating
50	Galesburg	Galesburg 650 Solar 1, LLC	1510 Knox Road 650 E	Galesburg City	Knox	2.000	Operating
51	Hopewell	Hopewell Solar, LLC	775 Hopewell Hills Road	Lacon	Marshall	1.642	Operating
52	Sparland	Sparland Solar, LLC	720 Hilltop Drive	Sparland	Marshall	1.950	Operating
53	Cameron	Cameron Solar, LLC	110 S Cameron Ln	Peoria	Peoria	1.950	Operating
54	Aldridge A	SV CSG Aldridge A, LLC	1294 North Corporation Street	Bridgeport	Lawrence	2.000	Operating
55	Aldridge B	SV CSG Aldridge B, LLC	1292 North Corporation Street	Bridgeport	Lawrence	2.000	Operating
56	Reifschneider 1A	SV CSG Reifschneider 1 A, LLC	2769 S Illinois St	Belleville	St Clair	1.000	Operating
57	Reifschneider 1B	SV CSG Reifschneider 1 B, LLC	2771 S Illinois St	Belleville	St Clair	2.000	Operating
58	Reifschneider 2A	SV CSG Reifschneider 2 A, LLC	2548 S Illinois St	Belleville	St Clair	2.000	Operating
59	Reifschneider 2B	SV CSG Reifschneider 2 B, LLC	2552 S Illinois St	Belleville	St Clair	2.000	Operating
60	Reifschneider 3A	SV CSG Reifschneider 3 A, LLC	2444 S Illinois St	Belleville	St Clair	2.000	Operating

## *EXHIBIT B: Site Plan*







## *EXHIBIT C: Threatened and Endangered Species Report*

**Threatened and Endangered Species Review**  
***Mahomet IL Solar 1, LLC***  
***Champaign County, Illinois***



**Prepared for:**

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*December 2023*

**AREAM**

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## INTRODUCTION

Area M Consulting (Area M), on behalf of Summit Ridge Energy, LLC (Client), conducted a wetland delineation for the Mahomet IL Solar 1, LLC (Project) located within Champaign County, Illinois. The Project, a 5-megawatt community solar garden, will be composed of ground-mounted solar panels, fencing, access and maintenance roads, equipment pads, and vegetative screening. The scope of this study includes both a desktop review and field investigation and is designed to identify T&E Species and protected resources known to occur within the region, locate present T&E Species, identify suitable habitat for each flagged T&E Species, and assess if these species are likely to be impacted by Project activities.

## PROJECT SETTING

The Project, encompassing 48.6 acres, is located 1 mile west of Mahomet, IL in Section 17, T20N:R7E (Study Area) (Appendix A). The Study Area includes a gently rolling agricultural field bordered by a railway to the north and wooded residential lots to the east and south. A driveway from 125E will access the Project from the west, crossing a small, ephemeral tributary to Spring Lake, located 0.3 miles to the south of the Study Area. A deep ravine and tributary to Spring Lake run north to south adjacent to the eastern edge of the Study Area. The land use, apart from the drainageway and vegetated buffer, is entirely agricultural, with annual soybean and corn rotation. The surrounding landscape consists of a mosaic residential neighborhoods, woodlands, agricultural fields, farmsteads, and impounded/excavated waterbodies. The entire Study Area is private property. (Appendix A).

## METHODS

Area M reviewed the United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) tool and the Illinois Department of Natural Resources (IDNR) Ecological Compliance Assessment Tool (EcoCAT) in conjunction with the Project setting to identify potential impacts to T&E Species. The IPaC tool was accessed and queried on December 23, 2023, to identify federal T&E Species known to occur within the Project vicinity. The Project was submitted through the EcoCAT portal to the IDNR in September of 2023, to determine if state T&E Species have been observed within the Project vicinity and request mitigation recommendations. Finally, a field visit was conducted within the Study Area on July 27, 2023, to identify potential habitat for T&E Species flagged by the IPaC and EcoCAT and summarize on-site conditions. T&E Species listed in the IPaC query and identified in the EcoCAT consultation letter are addressed below (Table 1). Aquatic species (e.g., mussels, fish) have been omitted from this review due to aquatic resource avoidance and/or the proposed use of erosion/runoff mitigation. Federal candidate species and state-protected plant species are omitted from this review due to their lack of protection on private land.

## RESULTS

The IPaC review and EcoCAT consultation letter identified **four** total T&E Species known to occur within the Project vicinity (Table 1, Appendix A). Each T&E Species flagged in this review is described in relation to habitat found within the Study Area, below. Field photos of representative habitat within the Study Area are presented in Appendix C.



**Table 1. T&E Species identified through the IPaC and EcoCAT.**

Species	Scientific Name	Group	Status <sup>1</sup>	Known Record <sup>2</sup>	Potential Habitat Present
Northern long-eared bat	<i>Myotis septentrionalis</i>	Mammal	FE/SE	No	Yes
Indiana bat	<i>Myotis sodalis</i>	Mammal	FE/SE	No	Yes
Whooping crane	<i>Grus americana</i>	Bird	EXPA	No	No
Eastern Prairie Fringed Orchid	<i>Platanthera leucophaea</i>	Plant	FT/ST	No	No

<sup>1</sup> FT-Federal Threatened; FE – Federal Endangered; ST – State Threatened; EXPA – Federal Experimental/non-essential; SE-State Endangered; SC-State Concerned

<sup>2</sup> Based on EcoCAT response  
USFWS, 2023a; IDNR, 2023a

- IPaC review
  - Four federally protected terrestrial species are known to occur within the Project vicinity (Appendix B)
  - No Critical Habitat within the Study Area
- IDNR Threatened and Endangered Species
  - 25 state-listed species in Champaign County
- EcoCAT
  - The EcoCAT information request and letter from the IDNR has concluded that adverse effects to protected species are unlikely
  - Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.
  - IDNR Natural Heritage Database does not contain record of Illinois Natural Area Inventory Sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves within the Study Area, though they are nearby(Appendix C)
  - No known Indiana bat or northern long-eared bat maternity roosts or hibernacula within the Study Area
- Field Review
  - No suitable roosting, brooding, or nesting habitat for T&E species
  - No T&E Species observed during the field survey

#### Northern long-eared bat

The northern long-eared bat is a medium-sized bat found across the eastern and north-central United States and all Canadian Provinces (USFWS, 2015). Long-eared bats cluster during the winter to hibernate in caves or mines. Summer/breeding habitat includes both live and dead trees, where they roost under loose bark, within cavities, and in crevices. This species will rarely roost in structures such as sheds or barns. Foraging habitat includes forest understory and woodland edges. The IDNR does not have a record of northern long-eared bat hibernacula or maternity roosts within the Project vicinity (IDNR, 2023a). This review identified suitable brooding habitat within the deciduous drainage bisecting the eastern access of the Study Area; additionally, a small number of suitable roosting trees will be removed for access road construction (Appendix A). Because there may be a federal nexus due to the waterway crossing, the USFWS northern long-eared bat determination key has determined the Project May Affect this species (Appendix D).

Therefore, Area M strongly recommends tree removal occurs from September 30 to April 1, coinciding with hibernation.

Indiana bat

The Indiana bat is a medium-sized bat found across the eastern half of the United States (USFWS, 2019a). Large numbers of Indiana bats cluster during the winter to hibernate in caves or mines. Summer/breeding habitat includes wooded areas, where they roost under loose bark and forage along forested edges. The IDNR does not have records of Indiana bat hibernacula or maternity roosts within the Project vicinity (IDNR, 2023a). This review identified suitable brooding habitat within the deciduous drainage bisecting the western access of the Study Area; additionally, a small number of suitable roosting trees will be removed for access road construction (Appendix A). Because If trees are cleared for Project construction, Area M recommends tree removal occurs from September 30 to April 1, coinciding with hibernation.

Whooping crane

The whooping crane, the tallest bird in North America, is a large, long-legged bird with snow white plumage and black wing tips (Urbanek and Lewis, 2020). This species is known for the recovery efforts to bring it back from the brink of extinction. The whooping crane prefers extensive wetland systems, localized to only a handful of locations in the United States. Migration habitat includes a variety of cropland and adjacent shallow, open water wetlands. Heavily vegetated wetlands are not generally used. Due to the absence of open wetland habitats within the Study Area, this species will not be likely be impacted by Project activities.

Eastern prairie fringed orchid

The eastern prairie fringed orchid is a plant with a single stalk and white flowers native throughout Illinois (USFWS, 2023b). This species occurs in mesic to wet tallgrass prairies and meadows but are also known to grow in roadside ditches and old fields. Due to the absence of tallgrass prairies and prevalence of cropping, this species will not likely be impacted by Project activities.

## DISCUSSION

Based on the review of USFWS and IDNR resources in conjunction with the field survey, it is the opinion of Area M that brooding and roosting habitat for northern long-eared bat and Indiana bat present within the Study Area. Because trees are proposed to be removed for this Project, Area M strongly recommends this activity occur during hibernation, when both species of bats will be absent from the landscape. Tree removal should occur September 30 to April 1. If any T&E Species described within this report are observed during Project activities, Area M advises the Client to contact the IDNR, USFWS, and Area M for further guidance.

---

## REFERENCES

Illinois Department of Natural Resources (IDNR). 2023a. EcoCAT Information Request Letter– Project Number 2408336. Springfield, Illinois.

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USFWS. 2023b. Eastern prairie fringed orchid fact sheet. Midwest Region Endangered Species. Retrieved from <https://www.fws.gov/midwest/endangered/plants/prairief.html>

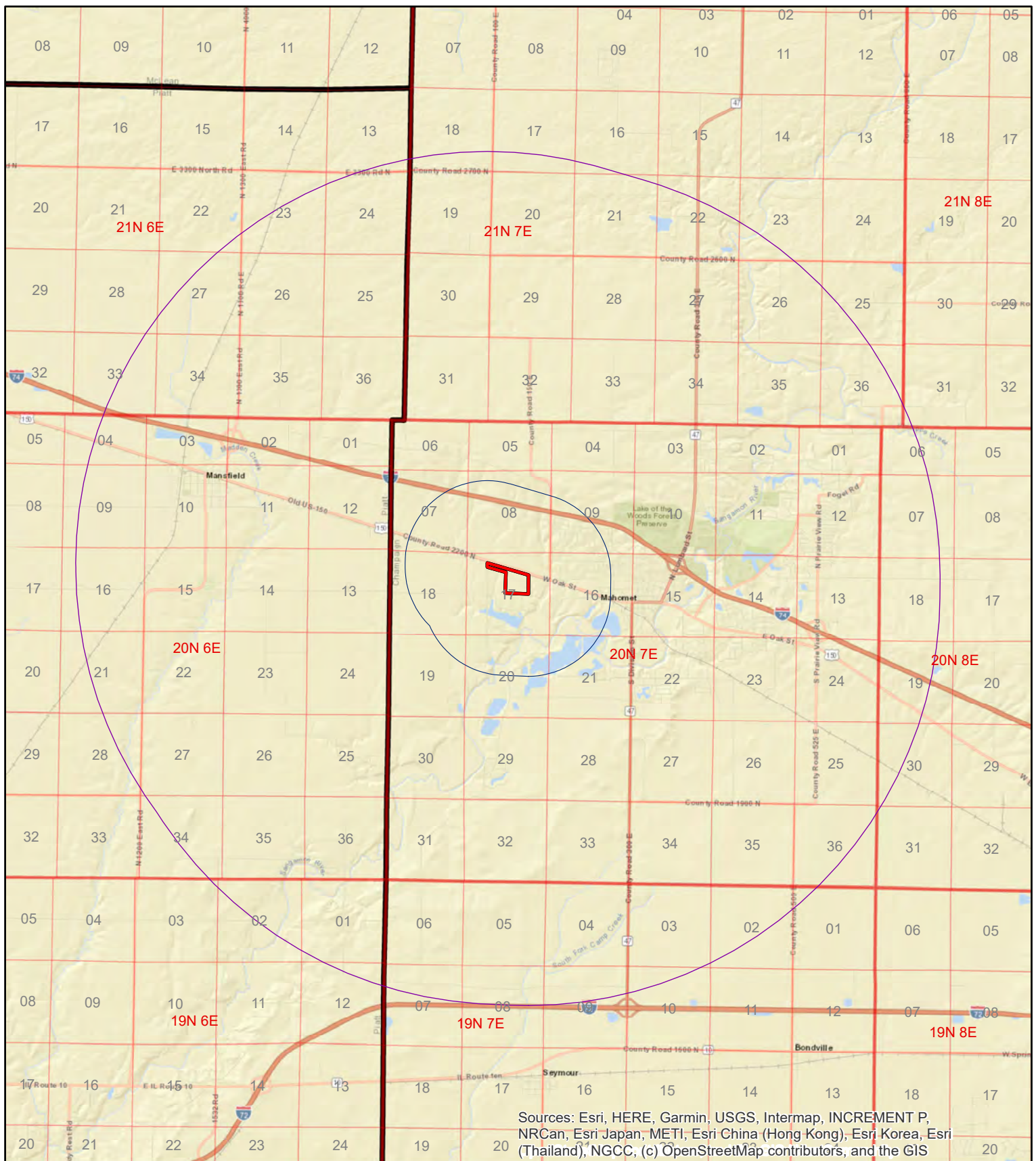
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USFWS. 2015. Northern long-eared bat fact sheet. Midwest Region Endangered Species. Retrieved from <https://www.fws.gov/midwest/endangered/mammals/nleb/nlebFactSheet.html>

Urbanek, R. P. and J. C. Lewis (2020). Whooping Crane (*Grus americana*), version 1.0. In *Birds of the World* (A. F. Poole, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bow.whocra.01>

## **Appendix A:**

### **Maps**



## Mahomet IL Solar 1, LLC

## Map 1. Location Map

Champaign County, IL

S17 T20N:R7E

48.6 Acres

40.19468 Lat

-88.43395 Long



Project Location



Study Area



1-Mile Buffer



5-Mile buffer



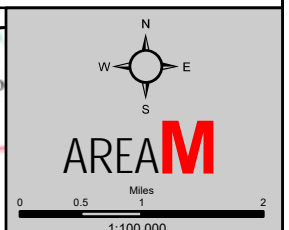
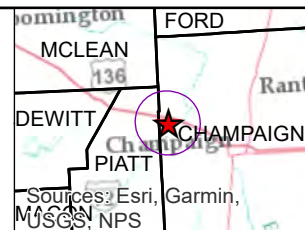
Section Line



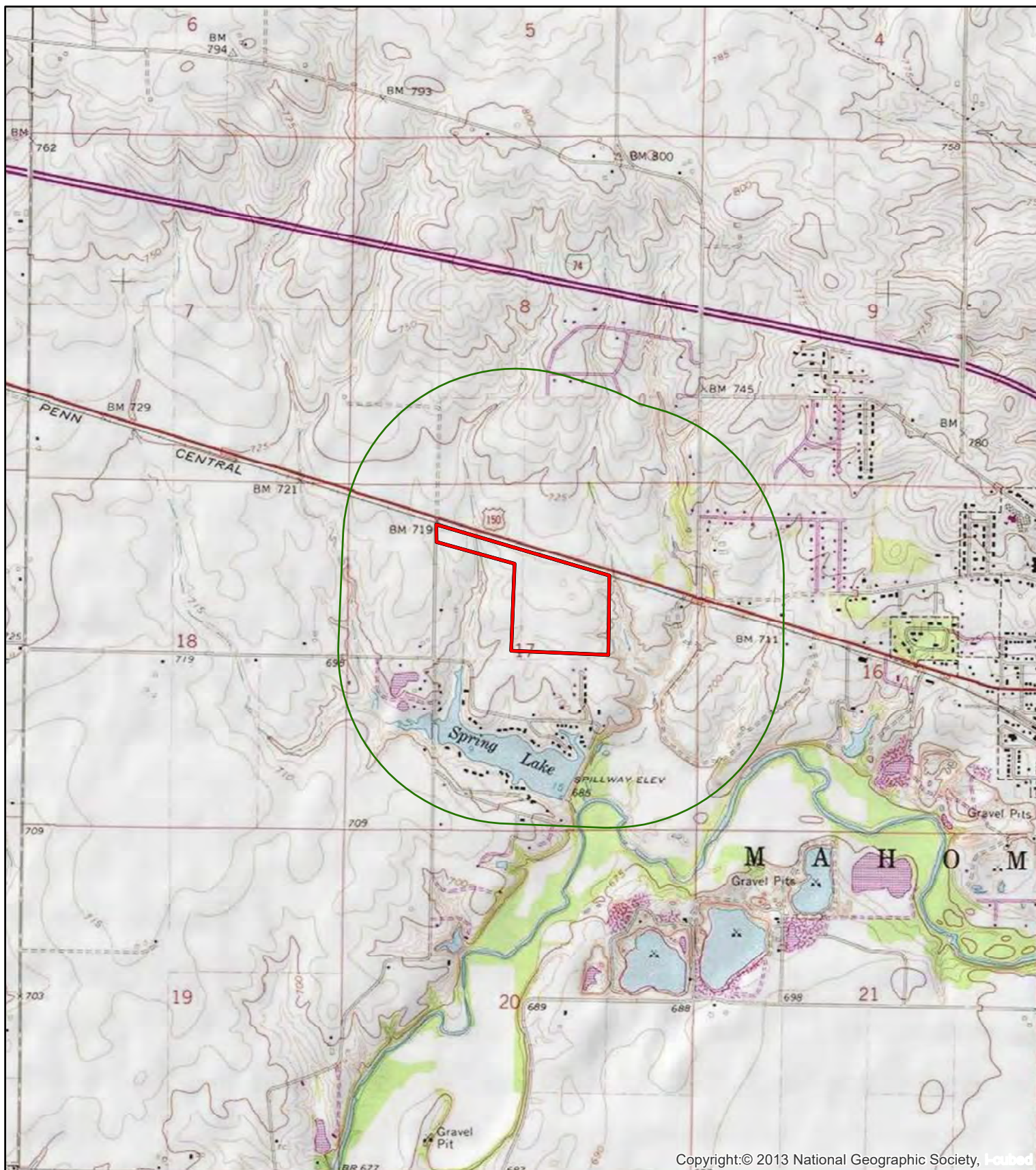
Township Line



County Line









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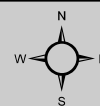
## Mahomet IL Solar 1, LLC

## Map 2. 1:24,000 Topographic

Champaign County, IL

 Study Area

 0.5-Mile Buffer



**AREA M**

0 0.125 0.25 0.5  
Miles  
1:24,000





Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

**Mahomet IL Solar 1, LLC**

**Map 3. Aerial Map**

Champaign County, IL



Study Area



**AREAM**

0 155 310 620 Feet  
1:8,010

**Appendix B:**  
**IPaC Report**



# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Project information

### NAME

IL-Mahomet-Nurmi Farm

### LOCATION

Champaign County, Illinois



### DESCRIPTION

Some(2-4MW solar facility composed of I-beams supporting photovoltaic arrays, and access road, various equipment pads, fencing, an infiltration pond, and vegetative

screening. One ephemeral/intermittent waterway will be crossed. Some trees will be removed. Project will be initiated in 2024.)

## Local office

### Southern Illinois Sub-Office

☎ (618) 998-5945

✉ [Marion@fws.gov](mailto:Marion@fws.gov)

#### MAILING ADDRESS

Southern Illinois Sub-office  
8588 Route 148  
Marion, IL 62959-5822

#### PHYSICAL ADDRESS

6987 Headquarters Road  
Marion, IL 62959

<https://www.fws.gov/office/illinois-iowa-ecological-services>

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
  2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of

Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
<b>Indiana Bat</b> <i>Myotis sodalis</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
<b>Northern Long-eared Bat</b> <i>Myotis septentrionalis</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered
<b>Tricolored Bat</b> <i>Perimyotis subflavus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

## Birds

NAME	STATUS
<b>Whooping Crane</b> <i>Grus americana</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	<a href="#">EXPN</a>

## Clams

NAME	STATUS
<b>Salamander Mussel</b> <i>Simpsonaias ambigua</i> Wherever found There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6208">https://ecos.fws.gov/ecp/species/6208</a>	Proposed Endangered

## Insects

NAME	STATUS
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Monarch Butterfly Danaus plexippus

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

## Flowering Plants

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NAME

STATUS

Eastern Prairie Fringed Orchid Platanthera leucophaea

Threatened

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/601>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

## Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

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Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

- Supplemental Information for Migratory Birds and Eagles in IPaC  
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

**What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?**

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).



1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC  
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read

["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

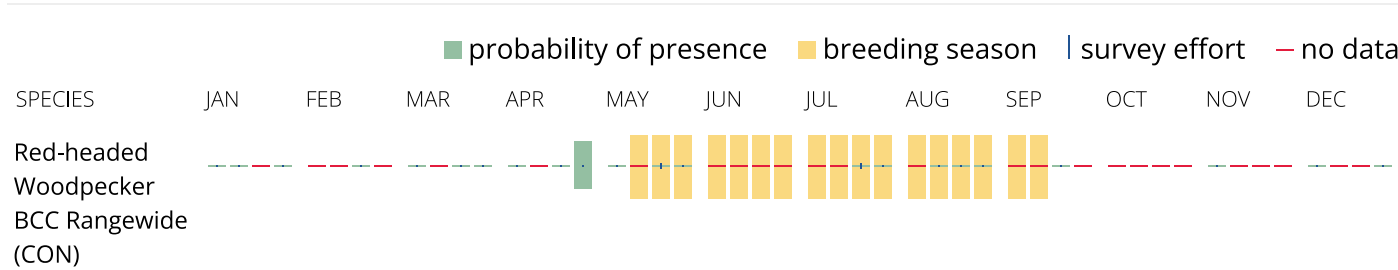
### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe



Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

## How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

## What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

## Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

## What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

## Proper Interpretation and Use of Your Migratory Bird Report



The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

## Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

**Appendix C:**  
**EcoCAT Query**



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
<http://dnr.state.il.us>

JB Pritzker, Governor

Natalie Phelps Finnie, Director

December 27, 2023

Jonathan Knudsen  
Area M Consulting  
2023 Alameda Street  
Roseville, MN 55113

**RE: IL - Mahomet - Nurmi Farms**  
**Project Number(s): 2408336**  
**County: Champaign**

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

However, the Department recommends the following:

The project proponent should establish pollinator-friendly habitat as groundcover wherever feasible. Solar Site Pollinator Establishment Guidelines can be found here:  
<https://dnr.illinois.gov/conservation/pollinatorscorecard.html>

The site should be de-compacted before planting. Long term management of the site should be planned for prior to development to ensure successful native pollinator habitat establishment for the lifetime of this project.

Required fencing, excluding areas near or adjacent to public access areas (e.g., roads, parking areas, trails, etc.), should not exceed 6 feet in height and should have a 6-inch gap along the bottom to prevent the restriction of wildlife movement.

Wildlife-friendly plastic-free blanket should be used to prevent the entanglement of native wildlife.

Required night lighting should follow International Dark-Sky Association (IDA) guidance to minimize the effect of light pollution on wildlife.



## Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
<http://dnr.state.il.us>

JB Pritzker, Governor

Natalie Phelps Finnie, Director

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe  
Division of Ecosystems and Environment  
217-785-5500

**Appendix D:**

**NLEB Determination Key Consistency Letter**





## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Southern Illinois Sub-Office

Southern Illinois Sub-office

8588 Route 148

Marion, IL 62959-5822

Phone: (618) 998-5945

Email Address: [Marion@fws.gov](mailto:Marion@fws.gov)

<https://www.fws.gov/office/illinois-iowa-ecological-services>



In Reply Refer To:

03/29/2024 14:01:39 UTC

Project code: 2024-0070067

Project Name: IL-Mahomet-Nurmi Farm

Federal Nexus: yes

Federal Action Agency (if applicable):

**Subject:** Technical assistance for 'IL-Mahomet-Nurmi Farm'

Dear Jonathan Knudsen:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on March 29, 2024, for 'IL-Mahomet-Nurmi Farm' (here forward, Project). This project has been assigned Project Code 2024-0070067 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

#### **Ensuring Accurate Determinations When Using IPaC**

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project. **Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter.**

#### **Determination for the Northern Long-Eared Bat**

Based on your IPaC submission and the standing analysis for the Dkey, your project has reached the determination of "May Affect" the northern long-eared bat.

#### **Next Steps**

Your action may qualify for the Interim Consultation Framework for the northern long-eared bat. To determine if it qualifies, review the Interim Consultation Framework posted here <https://www.fws.gov/library/collections/interim-consultation-framework-northern-long-eared-bat>. If you determine it meets the requirements of the Interim Consultation Framework, follow the procedures outlined there to complete section 7 consultation.

If your project does **not** meet the requirements of the Interim Consultation Framework, please contact the Southern Illinois Sub-Office for further coordination on this project. Further consultation or coordination with the Service is necessary for those species or designated critical habitats with a determination of “May Affect”.

### **Other Species and Critical Habitat that May be Present in the Action Area**

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Eastern Prairie Fringed Orchid *Platanthera leucophaea* Threatened
- Indiana Bat *Myotis sodalis* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Salamander Mussel *Simpsonaias ambigua* Proposed Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

You may coordinate with our Office to determine whether the Action may cause prohibited take of the species listed above.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

IL-Mahomet-Nurmi Farm

**2. Description**

The following description was provided for the project 'IL-Mahomet-Nurmi Farm':

2-4MW solar facility composed of I-beams supporting photovoltaic arrays, and access road, various equipment pads, fencing, an infiltration pond, and vegetative screening. One ephemeral/intermittent waterway will be crossed. Some trees will be removed. Project will be initiated in 2024.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.19571205,-88.43426134544131,14z>



## DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect” for the Endangered northern long-eared bat (*Myotis septentrionalis*).

## QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

**Note:** Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Does any component of the action involve construction or operation of wind turbines?

**Note:** For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

3. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

5. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

**Note:** This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

No

6. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

7. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

No

8. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the [effects of any activities](#) that would not occur but for the proposed action.

If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer “No” below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project’s action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a “no effect” determination for the northern long-eared bat.

**Note:** Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer “No” and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of [Effects of the Action](#) can be found here: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

No

9. [Semantic] Is the action area located within 0.5 miles of a known northern long-eared bat hibernaculum?

**Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

**Automatically answered**

No

10. Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating northern long-eared bats?

No

11. Does the action area contain or occur within 0.5 miles of (1) talus or (2) anthropogenic or naturally formed rock crevices in rocky outcrops, rock faces or cliffs?

No



12. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?  
(If unsure, answer "Yes.")

**Note:** If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags  $\geq 3$  inches (12.7 centimeter) dbh), answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

Yes

13. Will the action cause effects to a bridge?

No

14. Will the action result in effects to a culvert or tunnel?

No

15. Does the action include the intentional exclusion of northern long-eared bats from a building or structure?

**Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local U.S. Fish and Wildlife Services Ecological Services Field Office to help assess whether northern long-eared bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures

No

16. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats**?

No

17. Will the action directly or indirectly cause construction of one or more new roads that are open to the public?

**Note:** The answer may be yes when a publicly accessible road either (1) is constructed as part of the proposed action or (2) would not occur but for the proposed action (i.e., the road construction is facilitated by the proposed action but is not an explicit component of the project).

No

18. Will the action include or cause any construction or other activity that is reasonably certain to increase average daily traffic on one or more existing roads?

**Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

20. Will the proposed action involve the creation of a new water-borne contaminant source (e.g., leachate pond pits containing chemicals that are not NSF/ANSI 60 compliant)?

No

21. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

22. Will the action include drilling or blasting?

No

23. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

No

24. Will the proposed action involve the use of herbicide or other pesticides (e.g., fungicides, insecticides, or rodenticides)?

No

25. Will the action include or cause activities that are reasonably certain to cause chronic nighttime noise in suitable summer habitat for the northern long-eared bat? Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time.

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

No

26. Does the action include, or is it reasonably certain to cause, the use of artificial lighting within 1000 feet of suitable northern long-eared bat roosting habitat?

**Note:** Additional information defining suitable roosting habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

No

27. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

Yes

28. Does the action include emergency cutting or trimming of hazard trees in order to remove an imminent threat to human safety or property? See hazard tree note at the bottom of the key for text that will be added to response letters

**Note:** A "hazard tree" is a tree that is an immediate threat to lives, public health and safety, or improved property and has a diameter breast height of six inches or greater.

No

29. Are any of the trees proposed for cutting or other means of knocking down, bringing down, topping, or trimming suitable for northern long-eared bat roosting (i.e., live trees and/or snags  $\geq 3$  inches dbh that have exfoliating bark, cracks, crevices, and/or cavities)?

Yes

30. [Semantic] Does your project intersect a known sensitive area for the northern long-eared bat?

**Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your [state agency or USFWS field office](#)

**Automatically answered**

Yes

## PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

0.1

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the inactive (hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: <https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas>

0

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the active (non-hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: <https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas>

0.1

Will all potential northern long-eared bat (NLEB) roost trees (trees  $\geq 3$  inches diameter at breast height, dbh) be cut, knocked, or brought down from any portion of the action area greater than or equal to 0.1 acre? If all NLEB roost trees will be removed from multiple areas, select 'Yes' if the cumulative extent of those areas meets or exceeds 0.1 acre.

No

Enter the extent of the action area (in acres) from which all potential NLEB roost trees will be removed. If all NLEB roost trees will be removed from multiple areas, entire the total extent of those areas. Round up to the nearest tenth of an acre.

0.05

For the area from which all potential northern long-eared bat (NLEB) roost trees will be removed, on how many acres (round to the nearest tenth of an acre) will trees be allowed to regrow? Enter '0' if the entire area from which all potential NLEB roost trees are removed will be developed or otherwise converted to non-forest for the foreseeable future.

0

Will any snags (standing dead trees)  $\geq 3$  inches dbh be left standing in the area(s) in which all northern long-eared bat roost trees will be cut, knocked down, or otherwise brought down?

No

Will all project activities be completed by April 1, 2024?

No

## IPAC USER CONTACT INFORMATION

Agency: Private Entity

Name: Jonathan Knudsen

Address: 2023 Alameda Street

City: Roseville

State: MN

Zip: 55113

Email: jknudsen@areamconsulting.com

Phone: 2082415280



**Appendix E:**  
**Field Photos**



Representative upland cropland, viewed northwest from the east-central portion of the Study Area



Field margin, adjacent to woodland, viewed to the north from the eastern boundary of the Study Area





Mesic shrubland, viewed to the north from the northwestern access portion of the Study Area



Eroded, ephemeral wetland viewed to the south from the northwestern portion of the Study Area



## *EXHIBIT D: Decommissioning Plan*

# **DECOMMISSIONING PLAN**

**for**

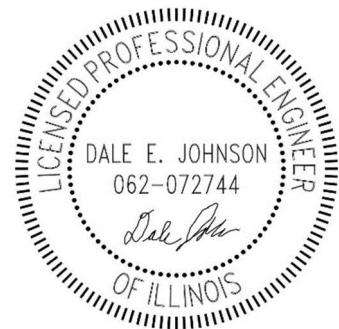
## **PROPOSED SOLAR DEVELOPMENT**

**Mahomet Solar  
County Rd 125E  
Mahomet, IL 61853  
Champaign County  
LAT/LONG: 40.194906, -88.434093**

**DATE: March 11, 2024**

***Prepared by:***

**Summit Ridge Energy.  
1000 Wilson Boulevard, Suite 2400  
Arlington, VA 22209**



**Dale Johnson, PE; License Expiration: 11/30/2025**





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## ATTACHMENTS

<b>Attachment 1</b>	<b>Decommissioning Estimate</b>
<b>Attachment 2</b>	<b>Site Plan</b>
<b>Attachment 3</b>	<b>County Solar Farm Ordinance</b>

## **OVERVIEW**

Summit Ridge Energy (SRE) has prepared this Decommissioning Plan for a proposed Solar Farm in Champaign County, IL called Nurmi. The proposed Solar Farm will be approximately 7.4 Megawatts (MW) direct current and 5.0 MW alternating current in size, and will have 10,920 modules mounted to single-axis-tracker type racking. The racking will track the sun's motion throughout the day and generate clean energy for interconnection to the public utility grid.

The location of the proposed solar facility is currently an agricultural field located approximately 1.5 miles west of Mahomet, Illinois off Highway 150. The project is located on an existing agricultural field that is cleared of major trees. The site topography is crowned such that the eastern side slopes to the east, and the west to the west an approximately 2% grade. The soils are predominantly silt loams.

The purpose of the Decommissioning Plan is to provide the general scope of work and construction cost estimate for the assurance/surety process. This document outlines the decommissioning activities required to restore the Solar Farm site to a meadow condition that existed prior to construction of the facility. The solar system has an anticipated design life of 40 years and is intended to be decommissioned after this period has ended.

The Solar Farm will produce power using photovoltaics (PV) panels mounted on ground supported galvanized metal piles. The facility will generally include equipment pads, perimeter security fencing, underground electrical conduits, overhead wires and utility poles, and a gravel access driveway. The major infrastructure quantities have summarized below, with the full detailed list provided in Attachment 1:

- Gravel Driveway – 48,173 square feet
- Perimeter Fence – 4,590 linear feet
- (2) Equipment Pads – 1,082 square feet
- Solar Modules – 12,696 Hanwah Q.peak

The reported costs include labor, materials, equipment, contractor's overhead, and profit; the labor costs have been estimated using regional labor rates.

## **DECOMMISSIONING ACTIVITIES**

### **DISMANTLEMENT, DEMOLITION, AND RECYCLING**

The dismantling and demolition of the Solar Farm shall generally include the removal of all solar electric systems, buildings, cabling, electrical components, roads, foundations, pilings, and any other associated facilities to a level not less than five feet below the surface.

Following coordination with the local utility company (Ameren) regarding timing and required procedures for disconnection, the Solar Farm connection will be removed from the electrical grid. All electrical connections to the system will be disconnected and all connections will be tested locally to confirm that no electric current is running through them before proceeding. All electrical connections to

the panels will be cut at the panel and then removed from their framework by cutting or dismantling the connections to the supports. Modules, inverters, transformers, meters, fans, lighting fixtures, and other electrical structures will be removed. The term “hazardous” will be defined by the laws and regulations in effect at the time of decommissioning. Disposal of these materials at a landfill will be governed by State and Public Local Laws of the County or Town and including the Code of Illinois Regulations (COILR) governing waste disposal at County area landfills, and as may be amended from time to time.

Acceptable waste facilities could include the County Landfill and could accept construction and demolition debris for the project. The Facility can accept non-recyclable waste; this estimate assumes a cost for the transport and disposal fee to this site. For the recyclable metal components, such as steel piles and racking and solar modules there are a selection of local metal recyclers/scrap yards, which are available to purchase the components upon decommissioning. We have assumed the transportation and delivery fee to a local recycler for the purposes of this estimate, and have excluded any salvage value.

All associated structures will be demolished and removed from the site for recycling or disposal, but no later than within 90 days after the end of energy production. The owner or operator shall notify the County Zoning Administrator by certified mail of the proposed date of discontinued operations and plans for removal.

Consultation with the landowner will determine if the access driveway should be left in place for their continued use. If the access driveway is deemed unnecessary by owner, the contractor will remove the gravel surface and base completely and backfilled with native soils. Clean aggregate can be disposed of offsite typically at landfills for no disposal cost. In the area of the former driveway, reuse native soils if possible for backfill and import additional topsoil, spread evenly to provide a smooth transition to existing grade. Stabilize soils with a native grassland seed mixture, unless otherwise specified by the local soil and water conservation district.

Sanitary facilities will be provided on-site for the workers conducting the decommissioning of the Solar Farm. Underground conduits/raceways will be removed in their entirety. Wiring associated with above ground wire hanging systems, such as CAB, will be removed. Above ground power lines and poles that are not owned by the utility will be removed by the general contractor, along with associated equipment (isolation switches, fuses, metering) and holes will be filled with clean and compacted soil. Poles and equipment owned by Ameren will be removed by them and reimbursed for the work by SRE.

A significant amount of the components of the photovoltaic system at the facility will include recyclable or re-saleable components, including copper, aluminum, galvanized steel, and modules. Due to their resale monetary value, these components will be dismantled and disassembled rather than being demolished and disposed. It is anticipated that materials may be salvaged and some of the costs recovered. It is assumed that the galvanized steel components such as the racking, fencing, and foundation system can be recycled for a market value salvage value. The project general contractor will maximize recycling and reuse and will work with manufacturers, local subcontractors, and waste firms to segregate material to be recycled, reused, and/or disposed of properly. However, salvage value has been excluded from the decommissioning estimate to provide a conservative decommissioning estimate.

Erosion and sediment control measures are required during the decommissioning process. These measures include a stabilized construction entrance, silt fence, concrete washout stations, and ground stabilization practices. The owner/operator will restore the project location to a vegetated meadow condition.

As with the project's construction, noise levels during the decommission work will increase. Proper steps will be followed to minimize the disturbance, such as using proper equipment for removing the support piles. Work hours are assumed to be 8 hours a day, during daylight hours. Also, road traffic in the area may increase temporarily due to crews and equipment movements. It is the responsibility of the general contractor to provide a traffic control plan to the appropriate reviewing authority, as needed, for approval prior to decommissioning.

A final site walkthrough will be conducted to remove debris and/or trash generated within the site during the decommissioning process and will include removal and proper disposal of any debris that may have been wind-blown to areas outside the immediate footprint of the facility being removed.

#### **SITE STABILIZATION AND RESTORATION**

The areas of the Solar Farm that are disturbed (during decommissioning) will require minor grading activities to restore the site to a pre-development condition. Grading is required to establish a uniform and consistent slope; the ground will be stabilized via hydro seeding with the surface treatment approved by the building inspector/planning board, including application of a selected native grassland seed mix to surfaces disturbed during the decommissioning process. Additionally, minor volumes of soil material will be required to restore the access driveways and concrete equipment pad area. Repair any damage to the onsite drainage tile. All site stabilization activities will be completed in accordance with the approved Sediment and Erosion Control Plan issued by the local Authority Having Jurisdiction (AHJ). At the time of approval of this plan, it is unknown whether a permit will be required for decommissioning, however, it will be verified with the County prior to commencement.

#### **CURRENT PERMITTING REQUIREMENTS**

We anticipate the following permits may be required prior to commencement of the decommissioning work: National Pollution Discharge Elimination Systems (NPDES) and a local Building Permit. However, because the decommissioning is expected to occur later in the future, the permitting requirements will be reviewed and might be subject to revisions based on local, state, and federal regulations at the time.

#### **SCHEDULE**

The decommissioning process is estimated to take approximately sixteen to eighteen (16-18) weeks, but no longer than six (6) months, and is intended to occur outside of the winter season.

The decommissioning plan may require re-submission to the County Building and Zoning Department, and will be verified with the county. See attachment 3 for additional county requirements relating to the decommissioning of the solar facility, which the decommissioning activities must abide by.

### **SOLAR DECOMMISSIONING ESTIMATE**

The decommissioning estimate is based on available regional labor rates and has neglected any credits for salvaging project material. It is estimated that the decommissioning of this project will cost approximately **\$496,257**. The terms set forth in this plan are binding.

We understand that the surety bond will be placed in an amount set at 125% of the estimate as required by the county ordinance. The detailed cost estimate is included below.





## ATTACHMENT 1: DECOMMISSIONING ESTIMATE



**DECOMMISSIONING COST ANALYSIS**  
**MAHOMET SOLAR PROJECT**  
DATE: 03.11.24



Standard Equipment and Work Crews Daily Rates			
Crew	Labor Hours, Daily total	Daily Cost (includes Sub O&P)	Comment
A-3C: Skid Steer 78 HP, 1 Equip Operator	8	\$ 1,169.70	General Site Work/loading
A-3D: 1 Flatbed Trailer 25 ton, 1 pickup truck, 1 Truck Driver	8	\$ 1,088.24	Module Loading
B-10B: 1 Dozer 200 HP, 1 Equipment operator, 0.5 laborer,	12	\$ 2,648.93	Remove Driveway, Site restoration
B-12D: 1 Hydraulic Excavator 3.5 CY, 1 Equip operator, 1 Laboror,	16	\$ 3,761.86	Remove Piles, excavation etc
B-17: 1 Backhoe 48 HP, 1 Dump Truck 8 CY, 2 laborers, 1 Operator, 1 Driver	32	\$ 3,454.23	Material Loading
A-31: 1 Hydraulic Crane 40 ton, 1 Equip operator	8	\$ 3,337.44	Material Loading
A-3P: Forklift, 31' reach, 1 operator	8	\$ 1,431.37	Equipment and Operator
B-2: 1 Labor Foreman, 4 laborers	40	\$ 2,925.60	General Labor
R-1: 1 foreman, 3 electricians, 2 apprentice	48	\$ 4,767.60	Skilled Labor
Equip. Rent-Boom, 60', w/ Operator-1 day (sect. 0154-40-0075)	8	\$ 571.50	Rental for Overhead line removal

Material and Equipment Removal Unit Rates				Hours
	Hours		Pile Removal Rate, piles/day	50
Module Removal Rate, module/hour	144		Time to remove overhead lines, LF/hr	50
Module Wire Removal Rate, hr	0.5		Time to remove a utility pole/hr	1
Time to remove AC/DC lines, LF/hr	100		Inverter Removal Rate, hr/inverter	0.5
Rack Removal Rate (Rack,wire,motor), Strings/hour	6		Transformer/switchgear Removal Rate, hr/unit	2
Grading Rate, CY/hour	100		Racking Loading Rate, min/LF	0.1
Fence Removal Rate, LF/Hr	300		Ground Seeding Rates, Ac/hr	1
Silt Fence Install/Removal rates, LF/HR	100			

DISASSEMBLY & DISPOSAL	QTY		Time to Complete Task, Days	Completed by Crew ID#	Labor Hours/ Total	Cost, \$
Remove Modules	12,696	Modules	12	B-2, A-3D, A-3P	672	\$ 65,342.52
Remove Inverters	40	EA	3	B-2, R-1	264	\$ 23,079.60
Remove Transformer, Switchgear, and misc. electrical equipment(s) loading	2	EA	1	A-31	8	\$ 3,337.44
Remove Foundation Piles	2,300	EA	6	B-12D, A-3C, A-3D	192	\$ 36,118.80
Remove Racking (torque tubes, motor, & supports) Strings	529	Strings	12	A-3D, A-3C, B-12D	384	\$ 72,237.60
Remove DC Wiring	4,600	LF	6	R-1, B-12D	384	\$ 51,176.76
Remove AC Wiring	2,700	LF	4	R-1, B-12D	256	\$ 34,117.84
Remove Fence	4,590	LF	2	B-17	64	\$ 6,908.46
Remove Gravel Access Drive	1338	CY	2	A-3C, B-10B, B-12D	72	\$ 15,160.98
Removal Utility Poles	6	EA	1	Rent-Boom Lift	8	\$ 571.50
Remove Equipment Pad	2	LS	1	B-12D, B-2	56	\$ 6,687.46
<b>SITE RESTORATION</b>						
Re-Seeding and mulching and site cleanup/restoration	36	AC	5	A-3C, B-2	240	\$ 20,477
Temporary Erosion and Sediment Control / silt fence	2500	LF	4	B-12	64	\$ 15,047
Construction Entrance	1	EA	1	B-12	8	\$ 2,000.00
<b>OTHER COSTS</b>			<b>Unit Cost</b>			
Transportation to transfer station (assumes 10 truckloads reqd)	120	\$/MILE	\$ 3.05			\$ 3,660.00
Panel Disposal (module weight 75 pounds)	476	Tons	\$ 200.00			\$ 95,220.00

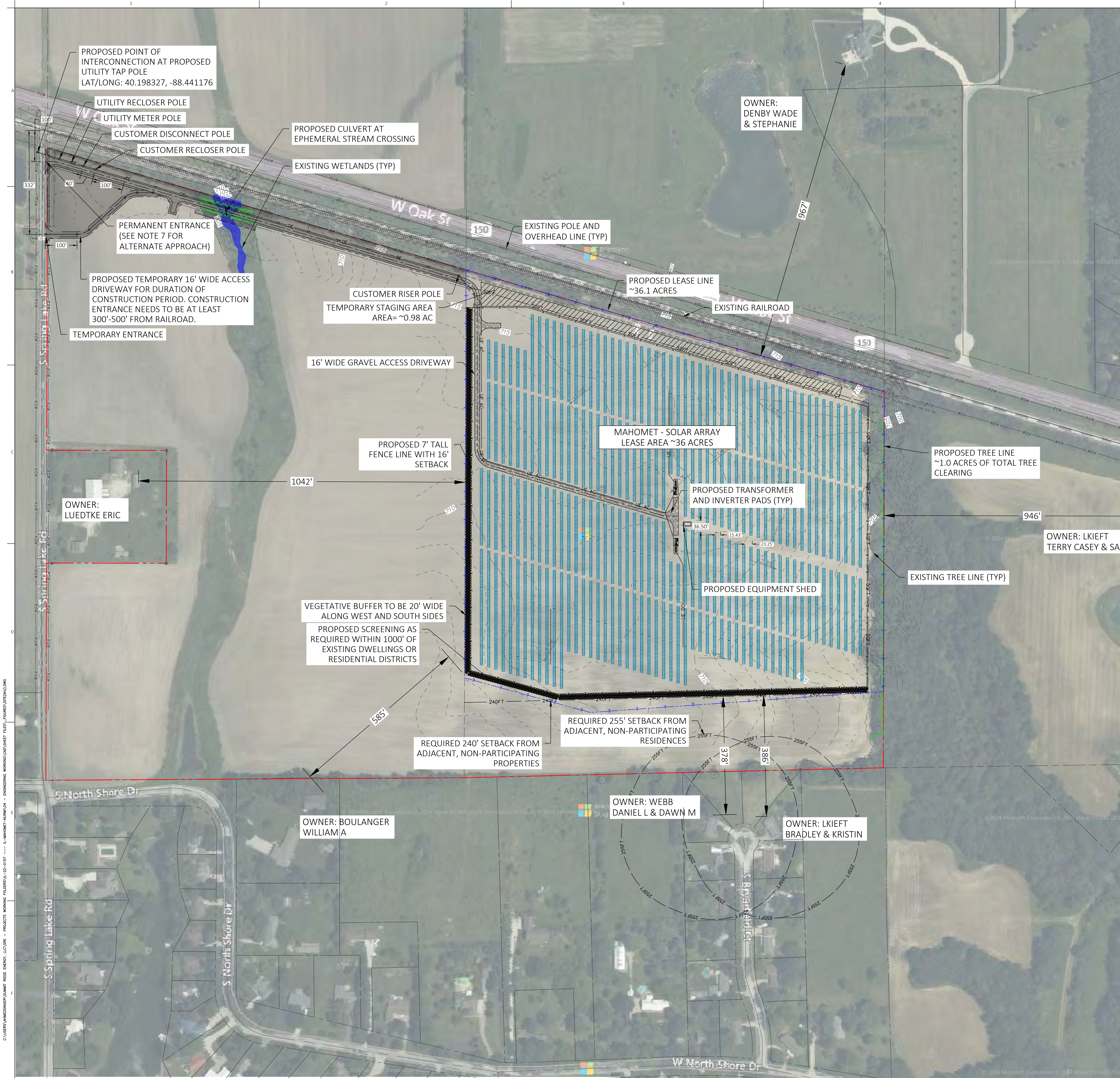
**Notes**

1. The crew rates provided are based on regional labor and crew rates per the RS Means: Site Work & Landscape Cost data book version 2024.

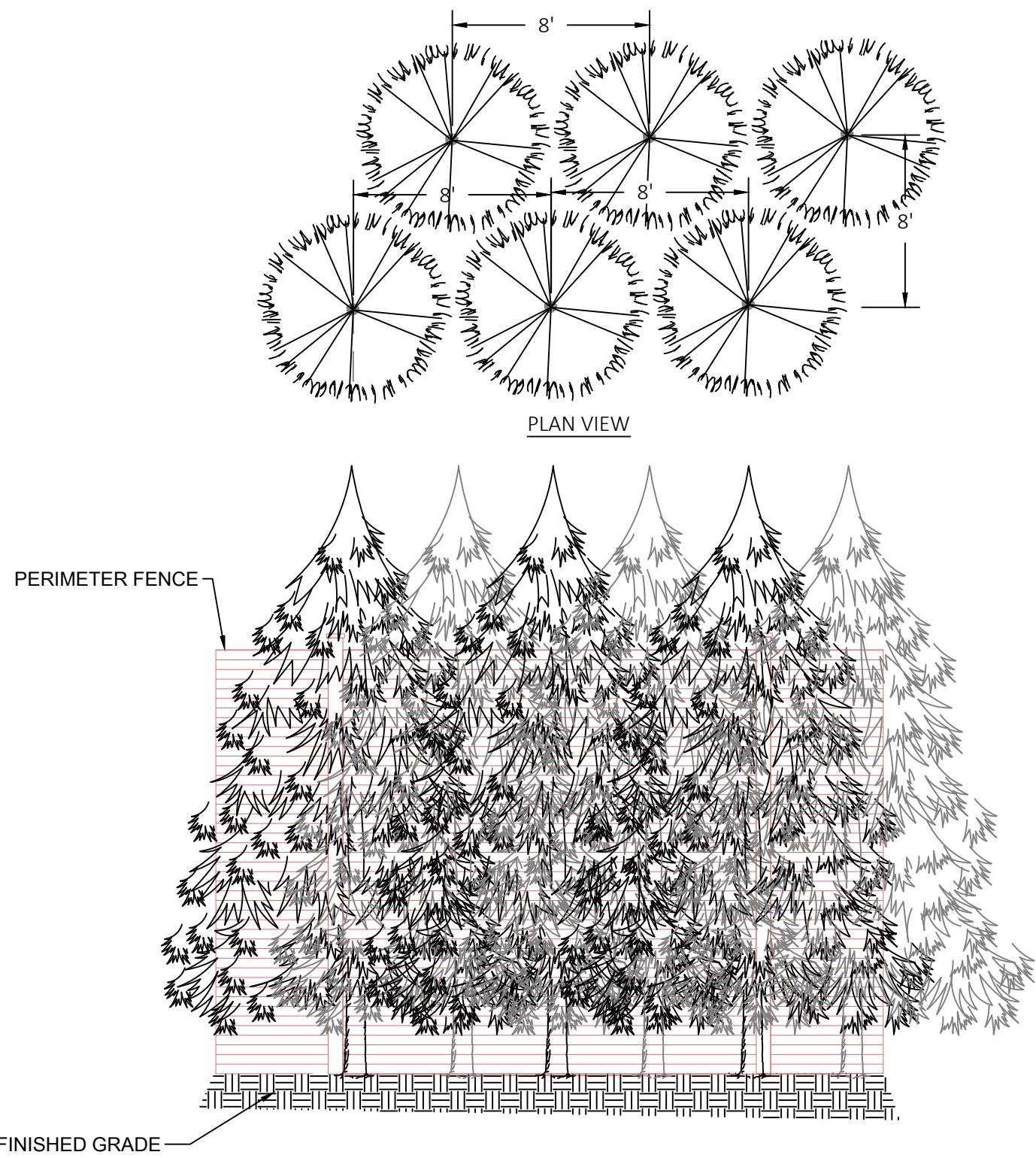
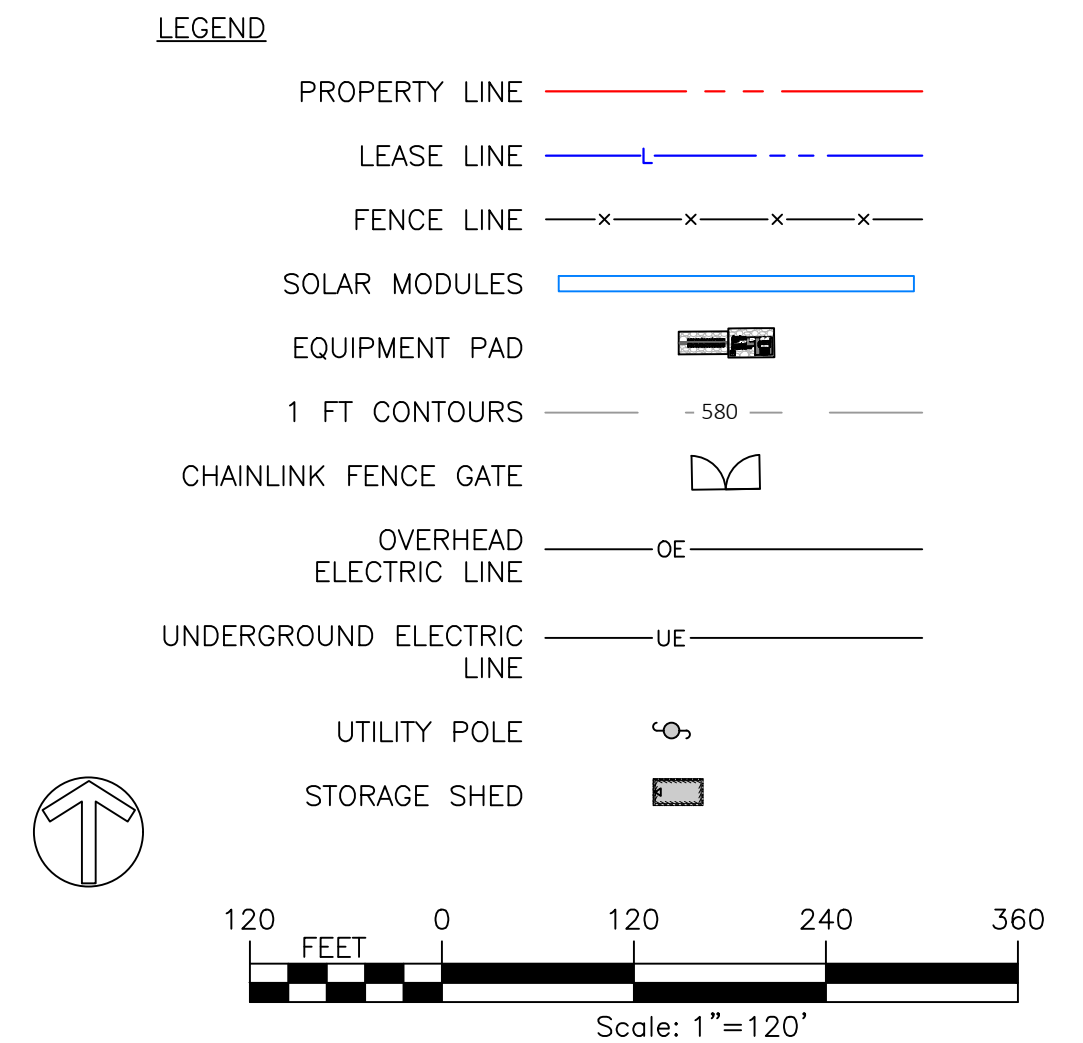
Labor Hours Total	2,600
Subtotal	\$ 451,143
Mobilization Cost, \$ (10%)	\$ 45,114
<b>TOTAL</b>	<b>\$ 496,257</b>

## ATTACHMENT 2: Civil Drawings





- NOTES:
1. THE PROPOSED SITE PLAN IS CONCEPTUAL. FINAL EQUIPMENT SELECTION MAY CHANGE DEPENDING ON ITS AVAILABILITY. SOME MINOR DEVIATIONS IN THE SITE LAYOUT SHOULD BE ANTICIPATED.
  2. PARCEL BOUNDARY LINE IS BASED ON GIS DATA AND SHOULD BE CONSIDERED APPROXIMATE AND IS BEING SHOWN FOR REFERENCE PURPOSES ONLY.
  3. WETLAND DELINEATION HAVE BEEN REFERENCED FROM THE NATIONAL WETLANDS INVENTORY AND IS BEING SHOWN FOR REFERENCE PURPOSES.
  4. POINT OF INTERCONNECTION LOCATION IS APPROXIMATE AND WILL BE DETERMINED FOLLOWING A SITE SURVEY BY THE ELECTRICAL UTILITY. POINT OF INTERCONNECTION POLE SERIES TO BE DESIGNED IN ACCORDANCE WITH ELECTRICAL UTILITY STANDARDS.
  5. TOPOGRAPHICAL INFORMATION IS SOURCED FROM THE NOAA LIDAR DATASET DATED 2019-2020.
  6. LOCATIONS OF WIRING WITHIN THE SOLAR ARRAY FOR REFERENCE PURPOSES ONLY. ACTUAL ROUTINGS TO BE DETERMINED IN DESIGN DEVELOPMENT STAGE.
  7. ALTERNATE APPROACH FOR ENTRANCE IS TO PROVIDE 150' FROM RAILROAD AS A SINGLE PERMANENT ACCESS POINT, ELIMINATING THE NEED FOR A SEPARATE TEMPORARY ACCESS POINT.
  8. THE PROJECT SYSTEM SIZE IS ANTICIPATED TO BE 7.49 MW DC AND 5.00 MW AC. SOME SLIGHT VARIATIONS FROM THE DC SIZE MAY OCCUR AS THE RESULT OF MODULE AVAILABILITY.
  9. PROJECT TO BE IN ACCORDANCE WITH THE CHAMPAIGN COUNTY ZONING CODE, LATEST EDITION, SPECIFICALLY WITH REGARDS TO LANDSCAPE SCREENING, PERIMETER FENCE REQUIREMENTS, AND SYSTEM HEIGHTS.



PLANT SCHEDULE				
TREES	QTY	BOTANICAL / COMMON NAME	SIZE <sup>1</sup>	SIZE <sup>2</sup> ROOT
TT	TBD	THUJA OCCIDENTALIS / TECHNY ARBORVITAE	5' HT	12-15' B&B

- NOTES:
1. TREES SHALL REACH A HEIGHT OF SIX (6) FEET OR GREATER IN THREE (3) YEARS, AND SHALL BE FIVE (5) FEET IN HEIGHT WHEN PLANTED.
  2. SEE PLAN VIEW FOR SPECIES TYPE AND PLANTING COUNT.
  3. TREE DETAIL PROVIDED FOR REFERENCE PURPOSES ONLY. EXACT SPECIES TO BE VERIFIED DURING DETAIL DESIGN.
  4. PLANT IN TWO STAGGERED ROWS AND SPACE SO THAT THE MATURE SPREAD THE SPACING SHOULD BE BASED ON THE AVERAGE DIAMETER OF THE PLANTS AT MATURITY. EACH SUCCESSIVE ROW IS OFFSET OR STAGGERED SO THAT THE PLANT FILLS THE VISIBLE GAP BETWEEN EACH OF THE PLANTS IN THE PREVIOUS ROW.
  5. TREE PLANTING SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT WAS PRE-DUG IN THE NURSERY.
  6. IT IS NOT RECOMMENDED TO AMEND THE EXISTING SOIL BEFORE BACKFILLING THE HOLE UNLESS SOIL CONDITIONS ARE POOR FOR PLANTING. WATER THOROUGHLY TO HELP ENSURE THE REMOVAL OF AIR POCKETS AND PROPERLY SET THE TREE.

01 LANDSCAPE SCREENING AND OPAQUE FENCE DETAIL  
C-01C-01 SCALE: NTS

REV	BY	DESCRIPTION	DATE
0	AW	SITE PLAN	03/01/2024
1	AW	RACING & LEASE UPDATES	03/05/2024
2	DEJ	ADDED SYSTEM SIZE NOTE	03/07/2024
3	DEJ	NOTE UPDATES	11/22/2024
4	AW	PROJECT NAME AND DETAILS UPDATES	11/26/2024

DRAWING ISSUE

☒ PRELIMINARY

☐ PERMITTING

☐ BID

☐ CONSTRUCTION

☐ AS-BUILT

☐ OTHER



NOT FOR CONSTRUCTION

PROJECT: MAHOMET SOLAR  
COUNTY RD 125 E,  
MAHOMET, IL 61853  
LAT/LONG: 40.194906, -88.434093  
UTILITY: AMEREN  
CHAMPAIGN COUNTY  
STATE: ILLINOIS

DRAWING TITLE:  
CONCEPTUAL SITE PLAN

DWG NO:  
C 01



### ATTACHMENT 3: County Ordinance



### **6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM County BOARD SPECIAL USE Permit**

A PHOTOVOLTAIC (PV) SOLAR FARM County BOARD SPECIAL USE Permit may only be authorized in the AG-1, Agriculture, Zoning DISTRICT or the AG-2, Agriculture, Zoning DISTRICT subject to the following standard conditions.

- A. In what follows, PV SOLAR FARM should be understood to include COMMUNITY PV SOLAR FARM unless specified otherwise in the relevant section or paragraph.
- B. General Standard Conditions
  - (1) The area of the PV SOLAR FARM County BOARD SPECIAL USE Permit must include the following minimum areas:
    - a. All land that will be exposed to a noise level greater than that authorized to Class A land as established by *35 Ill. Admin. Code Parts 900, 901 and 910* under paragraph 6.1.5I.
    - b. All necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS. For purposes of determining the minimum area of the SPECIAL USE Permit, access lanes or driveways shall be provided a minimum 40 feet wide area.
    - c. All necessary PV SOLAR FARM STRUCTURES and ACCESSORY STRUCTURES including electrical distribution lines, inverters, transformers, common switching stations, and substations not under the ownership of a PUBLICLY REGULATED UTILITY and all waterwells that will provide water for the PV SOLAR FARM. For purposes of determining the minimum area of the SPECIAL USE Permit, underground cable installations shall be provided a minimum 40 feet wide area.
    - d. All aboveground STRUCTURES and facilities shall be of a type and shall be located in a manner that is consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5R.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (2) The PV SOLAR FARM County BOARD SPECIAL USE Permit shall not be located in the following areas:
- a. Less than one and one-half miles from an incorporated municipality that has a zoning ordinance except for any power lines of 34.5 kVA or less and any related proposed connection to an existing substation. Any request for a waiver of this minimum separation shall include the following:
    - (a) No part of a PV SOLAR FARM shall be located within a contiguous growth area (CUGA) as indicated in the most recent update of the CUGA in the Champaign County Land Resource Management Plan, and there shall be a separation of one-half mile from a proposed PV SOLAR FARM to a municipal boundary at the time of application for the SPECIAL USE Permit.
    - (b) The ZONING ADMINISTRATOR shall notify in writing any municipality that is located within one and one-half miles from any proposed PV SOLAR FARM upon the receipt of any substantial PV SOLAR FARM SPECIAL USE permit application in addition to any notice otherwise required.
    - (c) The PV SOLAR FARM SPECIAL USE Permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE Permit application to any municipality within one and one-half miles of the proposed PV SOLAR FARM.
    - (d) Municipal subdivision approval for any PV SOLAR FARM land lease exceeding five years may be required by any relevant municipal authority that has an adopted comprehensive plan and when required said subdivision approval shall be necessary for compliance with Section 13.2.1.
    - (e) The public hearing for any proposed PV SOLAR FARM that is located within one and one-half miles of a municipality that has a zoning ordinance shall occur at a minimum of two Board meetings that are not less than 28 days apart to provide time for municipal comments during the public hearing, unless the 28-day comment period is waived in writing by any relevant municipality.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (f) For any proposed PV SOLAR FARM that is located within one and one-half miles of a municipality that has a zoning ordinance, the ZONING ADMINISTRATOR shall notify said municipality of the recommendation by the BOARD after the close of the public hearing.
- (g) After the initial review of the BOARD recommendation for the PV SOLAR FARM SPECIAL USE Permit by the Environment and Land Use Committee of the COUNTY BOARD, if the Environment and Land Use Committee makes a preliminary determination to accept the BOARD recommendation, the PV SOLAR FARM SPECIAL USE Permit shall remain at the Environment and Land Use Committee for a maximum 30-day comment period, or until the next regularly scheduled meeting, to allow comments regarding the PV SOLAR FARM SPECIAL USE Permit to be received from any relevant municipal authority prior to the Environment and Land Use Committee recommendation to the COUNTY BOARD, unless the municipal comment period is waived in writing by any relevant municipality. If a PV SOLAR FARM is not located within one and one-half miles of a municipality the Environment and Land Use Committee recommendation can be referred to the COUNTY BOARD without a comment period.
- (h) If no municipal resolution regarding the PV SOLAR FARM is received from any municipality located within one and one-half miles of the PV SOLAR FARM prior to the consideration of the PV SOLAR FARM SPECIAL USE Permit by the Champaign COUNTY BOARD, the ZONING ADMINISTRATOR shall provide documentation to the COUNTY BOARD that any municipality within one and one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the COUNTY BOARD.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (3) Interconnection to the power grid
  - a. The PV SOLAR FARM SPECIAL USE Permit application shall include documentation that the applicant or PV SOLAR FARM is in the queue to acquire an interconnection agreement to the power grid.
  - b. Documentation of an executed interconnection agreement with the appropriate electric utility shall be provided prior to issuance of a Zoning Compliance Certificate to authorize operation of the PV SOLAR FARM.
- (4) Right to farm
  - a. The owners of the subject property and the Applicant, its successors in interest, and all parties to the decommissioning plan and site reclamation plan hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.

**C. Minimum LOT Standards**

- (1) There are no minimum LOT AREA, AVERAGE LOT WIDTH, SETBACK, YARD, or maximum LOT COVERAGE requirements for a PV SOLAR FARM or for LOTS for PV SOLAR FARM substations and/or for PV SOLAR FARM maintenance and management facilities.
- (2) There is no maximum LOT AREA requirement on BEST PRIME FARMLAND.

**D. Minimum Standard Conditions for Separations for PV SOLAR FARM from adjacent USES and STRUCTURES**

The location of each PV SOLAR FARM shall provide the following required separations as measured from the exterior of the above ground portion of the PV SOLAR FARM STRUCTURES and equipment including fencing:

- (1) PV SOLAR FARM fencing shall be set back from the street centerline a minimum of 40 feet from a MINOR STREET and a minimum 55 feet from a COLLECTOR STREET and a minimum of 60 feet from a MAJOR STREET unless a greater separation is required for screening pursuant to Section 6.1.5M.2.a. but in no case shall the perimeter fencing be less than 10 feet from the RIGHT OF WAY of any STREET.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (2) For properties participating in the solar farm: No required separation from any existing DWELLING or existing PRINCIPAL BUILDING except as required to ensure that a minimum zoning LOT is provided for the existing DWELLING or PRINCIPAL BUILDING.
- (3) For properties not participating in the solar farm:
  - a. For any adjacent LOT that is 10 acres or less in area (not including the STREET RIGHT OF WAY):
    - (a) For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on no more than two sides by the PV SOLAR FARM, the separation shall be no less than 240 feet from the property line.
    - (b) For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on more than two sides by the PV SOLAR FARM, the separation shall exceed 240 feet as deemed necessary by the BOARD.
  - b. For any adjacent LOT that is more than 10 acres in area (not including the STREET RIGHT OF WAY), the separation shall be no less than 255 feet from any existing DWELLING or existing PRINCIPAL BUILDING and otherwise the perimeter fencing shall be a minimum of 10 feet from a SIDE or REAR LOT LINE. This separation distance applies to properties that are adjacent to or across a STREET from a PV SOLAR FARM.
  - c. Additional separation may be required to ensure that the noise level required by *35 Ill. Admin. Code Parts 900, 901 and 910* is not exceeded or for other purposes deemed necessary by the BOARD.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (4) A separation of at least 500 feet from any of the following unless the SPECIAL USE Permit application includes results provided from an analysis using the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, Federal Aviation Administration (FAA) Review of Solar Energy Projects on Federally Obligated Airports, or the most recent version adopted by the FAA, and the SGHAT results show no detrimental affect with less than a 500 feet separation from any of the following:
  - a. any AIRPORT premises or any AIRPORT approach zone within five miles of the end of the AIRPORT runway; or
  - b. any RESTRICTED LANDING AREA that is NONCONFORMING or which has been authorized by SPECIAL USE Permit and that existed on or for which there had been a complete SPECIAL USE Permit application received by April 22, 2010, or any approach zone for any such RESTRICTED LANDING AREA; or
  - c. any RESIDENTIAL AIRPORT that existed on or for which there had been a complete SPECIAL USE Permit application received by April 22, 2010, or any approach zone for any such RESIDENTIAL AIRPORT.
- (5) A separation of at least 500 feet between substations and transmission lines of greater than 34.5 kVA to adjacent dwellings and residential DISTRICTS.
- (6) Electrical inverters shall be located as far as possible from property lines and adjacent DWELLINGS consistent with good engineering practice. Inverter locations that are less than 275 feet from the perimeter fence shall require specific approval and may require special sound deadening construction and noise analysis.
- (7) Separation distances for any PV SOLAR FARM with solar equipment exceeding 8 feet in height, with the exception of transmission lines which may be taller, shall be determined by the BOARD on a case-by-case basis.
- (8) PV SOLAR FARM solar equipment other than inverters shall be no less than 26 feet from the property line of any lot more than 10 acres in area.



**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

**E. Standard Conditions for Design and Installation of any PV SOLAR FARM.**

- (1) Any building that is part of a PV SOLAR FARM shall include as a requirement for a Zoning Compliance Certificate, a certification by an Illinois Professional Engineer or Illinois Licensed Structural Engineer or other qualified professional that the constructed building conforms to Public Act 96-704 regarding building code compliance and conforms to the Illinois Accessibility Code.
- (2) Electrical Components
  - a. All electrical components of the PV SOLAR FARM shall conform to the National Electrical Code as amended and shall comply with Federal Communications Commission (FCC) requirements.
  - b. Burying power and communication wiring underground shall be minimized consistent with best management practice regarding PV SOLAR FARM construction and minimizing impacts on agricultural drainage tile.
- (3) Maximum Height. The height limitation established in Section 5.3 shall not apply to a PV SOLAR FARM. The maximum height of all above ground STRUCTURES shall be identified in the application and as approved in the SPECIAL USE Permit.
- (4) Warnings
  - a. A reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.
- (5) No construction may intrude on any easement or right-of-way for a GAS PIPELINE or HAZARDOUS LIQUID PIPELINE, an underground water main or sanitary sewer, a drainage district ditch or tile, or any other public utility facility unless specifically authorized by a crossing agreement that has been entered into with the relevant party.

**F. Standard Conditions to Mitigate Damage to Farmland**

- (1) All underground wiring or cabling for the PV SOLAR FARM shall be at a minimum depth of 5 feet below grade or deeper if required to maintain a minimum one foot of clearance between the wire or cable and any agricultural drainage tile or a lesser depth if so authorized by the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5R.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (2) Protection of agricultural drainage tile
- a. The applicant shall endeavor to locate all existing agricultural drainage tile prior to establishing any construction staging areas, construction of any necessary PV SOLAR FARM access lanes or driveways, construction of any PV SOLAR FARM STRUCTURES, any common switching stations, substations, and installation of underground wiring or cabling. The applicant shall contact affected landowners and tenants and the Champaign County Soil and Water Conservation District and any relevant drainage district for their knowledge of tile line locations prior to the proposed construction. Drainage districts shall be notified at least two weeks prior to disruption of tile.
  - b. The location of drainage district tile lines shall be identified prior to any construction and drainage district tile lines shall be protected from disturbance as follows:
    - (a) All identified drainage district tile lines and any known existing drainage district tile easement shall be staked or flagged prior to construction to alert construction crews of the presence of drainage district tile and the related easement.
    - (b) Any drainage district tile for which there is no existing easement shall be protected from disturbance by a 30 feet wide no-construction buffer on either side of the drainage district tile. The no-construction buffer shall be staked or flagged prior to the start of construction and shall remain valid for the lifetime of the PV SOLAR FARM SPECIAL USE Permit and during any deconstruction activities that may occur pursuant to the PV SOLAR FARM SPECIAL USE Permit.
    - (c) Construction shall be prohibited within any existing drainage district easement and also prohibited within any 30 feet wide no-construction buffer on either side of drainage district tile that does not have an existing easement unless specific construction is authorized in writing by all commissioners of the relevant drainage district. A copy of the written authorization shall be provided to the Zoning Administrator prior to the commencement of construction.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- c. Any agricultural drainage tile located underneath construction staging areas, access lanes, driveways, any common switching stations, and substations shall be replaced as required in Section 6.3 of the Champaign County Storm Water Management and Erosion Control Ordinance.
- d. Any agricultural drainage tile that must be relocated shall be relocated as required in the Champaign County Storm Water Management and Erosion Control Ordinance.
- e. Conformance of any relocation of drainage district tile with the Champaign County Storm Water Management and Erosion Control Ordinance shall be certified by an Illinois Professional Engineer. Written approval by the drainage district shall be received prior to any backfilling of the relocated drain tile and a copy of the approval shall be submitted to the Zoning Administrator. As-built drawings shall be provided to both the relevant drainage district and the Zoning Administrator of any relocated drainage district tile.
- f. All tile lines that are damaged, cut, or removed shall be staked or flagged in such manner that they will remain visible until the permanent repairs are completed.
- g. All exposed tile lines shall be screened or otherwise protected to prevent the entry into the tile of foreign materials, loose soil, small mammals, etc.
- h. Permanent tile repairs shall be made within 14 days of the tile damage provided that weather and soil conditions are suitable or a temporary tile repair shall be made. Immediate temporary repair shall also be required if water is flowing through any damaged tile line. Temporary repairs are not needed if the tile lines are dry and water is not flowing in the tile provided the permanent repairs can be made within 14 days of the damage. All permanent and temporary tile repairs shall be made as detailed in the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5R. and shall not be waived or modified except as authorized in the SPECIAL USE Permit.
- i. All damaged tile shall be repaired so as to operate as well after construction as before the construction began.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- j. Following completion of the PV SOLAR FARM construction, the applicant shall be responsible for correcting all tile line repairs that fail, provided that the failed repair was made by the Applicant.
- (3) All soil conservation practices (such as terraces, grassed waterways, etc.) that are damaged by PV SOLAR FARM construction and/or decommissioning shall be restored by the applicant to the pre-PV SOLAR FARM construction condition in a manner consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5R.
- (4) Topsoil replacement
- For any open trenching required pursuant to PV SOLAR FARM construction, the topsoil shall be stripped and replaced as follows:
- a. The top 12 inches of topsoil shall first be stripped from the area to be trenched and from an adjacent area to be used for subsoil storage. The topsoil shall be stored in a windrow parallel to the trench in such a manner that that it will not become intermixed with subsoil materials.
  - b. All subsoil material that is removed from the trench shall be placed in the second adjacent stripped windrow parallel to the trench but separate from the topsoil windrow.
  - c. In backfilling the trench, the stockpiled subsoil material shall be placed back into the trench before replacing the topsoil.
  - d. The topsoil must be replaced such that after settling occurs, the topsoil's original depth and contour (with an allowance for settling) will be restored.
  - e. All topsoil shall be placed in a manner consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5R.
- (5) Mitigation of soil compacting and rutting
- a. The Applicant shall not be responsible for mitigation of soil compaction and rutting if exempted by the PV SOLAR FARM lease.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- b. Unless specifically provided for otherwise in the PV SOLAR FARM lease, the Applicant shall mitigate soil compaction and rutting for all areas of farmland that were traversed with vehicles and construction equipment or where topsoil is replaced in open trenches.
  - c. All mitigation of soil compaction and rutting shall be consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5R.
- (6) Land leveling
  - a. The Applicant shall not be responsible for leveling of disturbed land if exempted by the PV SOLAR FARM lease.
  - b. Unless specifically provided for otherwise in the PV SOLAR FARM lease, the Applicant shall level all disturbed land as follows:
    - (a) Following the completion of any open trenching, the applicant shall restore all land to its original pre-construction elevation and contour.
    - (b) Should uneven settling occur or surface drainage problems develop as a result of the trenching within the first year after completion, the applicant shall again restore the land to its original pre-construction elevation and contour.
  - c. All land leveling shall be consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5R.
- (7) Permanent Erosion and Sedimentation Control Plan
  - a. Prior to the approval of any Zoning Use Permit, the Applicant shall provide a permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.



**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- b. As-built documentation of all permanent soil erosion and sedimentation improvements for the PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer shall be submitted and accepted by the Zoning Administrator prior to approval of any Zoning Compliance Certificate.

**(8) Retention of all topsoil**

No topsoil may be removed, stripped, or sold from the proposed SPECIAL USE Permit site pursuant to or as part of the construction of the PV SOLAR FARM.

**(9) Minimize disturbance to BEST PRIME FARMLAND**

- a. Any PV SOLAR FARM to be located on BEST PRIME FARMLAND shall minimize the disturbance to BEST PRIME FARMLAND as follows:
  - (a) The disturbance to BEST PRIME FARMLAND caused by construction and operation of the PV SOLAR FARM shall be minimized at all times consistent with good engineering practice.
  - (b) Disturbance to BEST PRIME FARMLAND shall be offset by establishment of a vegetative ground cover within the PV SOLAR FARM that includes the following:
    - i. The vegetative ground cover shall use native plant species as much as possible and shall be based on a site assessment of the site geography and soil conditions.
    - ii. The species selected shall serve a secondary habitat purpose as much as possible.
    - iii. Maintenance of the vegetative ground cover shall use a combination of management approaches to ensure safe, cost-effective, reliable maintenance while minimizing environmental risks.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- iv. The plan to establish and maintain a vegetative ground cover that includes native plant species as much as possible shall be detailed in a landscape plan included in the PV SOLAR FARM SPECIAL USE Permit application. The landscape plan shall include the weed control plan required by Section 6.1.5 P.3.

**G. Standard Conditions for Use of Public Streets**

Any PV SOLAR FARM Applicant proposing to use any County Highway or a township or municipal STREET for the purpose of transporting PV SOLAR FARM or Substation parts and/or equipment for construction, operation, or maintenance of the PV SOLAR FARM or Substation(s), shall identify all such public STREETS and pay the costs of any necessary permits and the costs to repair any damage to the STREETS caused by the PV SOLAR FARM construction, as follows:

- (1) Prior to the close of the public hearing before the BOARD, the Applicant shall enter into a Roadway Upgrade and Maintenance agreement approved by the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, except for any COMMUNITY PV SOLAR FARM for which the relevant highway authority has agreed in writing to waive the requirements of subparagraphs 6.1.5G.1, 6.1.5G.2, and 6.1.5G.3, and the signed and executed Roadway Upgrade and Maintenance agreements must provide for the following minimum conditions:
  - a. The applicant shall agree to conduct a pre-PV SOLAR FARM construction baseline survey to determine existing STREET conditions for assessing potential future damage including the following:
    - (a) A videotape of the affected length of each subject STREET supplemented by photographs if necessary.
    - (b) Pay for costs of the County to hire a consultant to make a study of any structure on the proposed route that the County Engineer feels may not carry the loads likely during the PV SOLAR FARM construction.
    - (c) Pay for any strengthening of STREET structures that may be necessary to accommodate the proposed traffic loads caused by the PV SOLAR FARM construction.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- b. The Applicant shall agree to pay for costs of the County Engineer to hire a consultant to make a study of any structure on the proposed route that the County Engineer feels may not carry the loads likely during the PV SOLAR FARM construction and pay for any strengthening of structures that may be necessary to accommodate the proposed traffic loads caused by the PV SOLAR FARM construction.
- c. The Applicant shall agree upon an estimate of costs for any other necessary roadway improvements prior to construction.
- d. The Applicant shall obtain any necessary approvals for the STREET improvements from the relevant STREET maintenance authority.
- e. The Applicant shall obtain any necessary Access Permits including any required plans.
- f. The Applicant shall erect permanent markers indicating the presence of underground cables.
- g. The Applicant shall install marker tape in any cable trench.
- h. The Applicant shall become a member of the Illinois statewide One-Call Notice System (otherwise known as the Joint Utility Locating Information for Excavators or “JULIE”) and provide JULIE with all of the information necessary to update its record with respect to the PV SOLAR FARM.
- i. The Applicant shall use directional boring equipment to make all crossings of County Highways for the cable collection system.
- j. The Applicant shall notify the STREET maintenance authority in advance of all oversize moves and crane crossings.
- k. The Applicant shall provide the County Engineer with a copy of each overweight and oversize permit issued by the Illinois Department of Transportation for the PV SOLAR FARM construction.
- l. The Applicant shall transport the PV SOLAR FARM loads so as to minimize adverse impact on the local traffic including farm traffic.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- m. The Applicant shall schedule PV SOLAR FARM construction traffic in a way to minimize adverse impacts on emergency response vehicles, rural mail delivery, school bus traffic, and local agricultural traffic.
- n. The Applicant shall provide as much advance notice as in commercially reasonable to obtain approval of the STREET maintenance authority when it is necessary for a STREET to be closed due to a crane crossing or for any other reason. Notwithstanding the generality of the aforementioned, the Applicant will provide 48 hours notice to the extent reasonably practicable.
- o. The Applicant shall provide signs indicating all highway and STREET closures and work zones in accordance with the Illinois Department of Transportation Manual on Uniform Traffic Control Devices.
- p. The Applicant shall establish a single escrow account and a single Irrevocable Letter of Credit for the cost of all STREET upgrades and repairs pursuant to the PV SOLAR FARM construction.
- q. The Applicant shall notify all relevant parties of any temporary STREET closures.
- r. The Applicant shall obtain easements and other land rights needed to fulfill the Applicant's obligations under this Agreement.
- s. The Applicant shall agree that the County shall design all STREET upgrades in accordance with the most recent edition of the IDOT Bureau of Local Roads and Streets Manual.
- t. The Applicant shall provide written Notice to Proceed to the relevant STREET maintenance authority by December 31 of each year that identifies the STREETS to be upgraded during the following year.
- u. The Applicant shall provide dust control and grading work to the reasonable satisfaction of the County Engineer on STREETS that become aggregate surface STREETS.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- v. The Applicant shall conduct a post-PV SOLAR FARM construction baseline survey similar to the pre-PV SOLAR FARM construction baseline survey to identify the extent of repairs necessary to return the STREETS to the pre-PV SOLAR FARM construction condition.
  - w. The Applicant shall pay for the cost of all repairs to all STREETS that are damaged by the Applicant during the construction of the PV SOLAR FARM and restore such STREETS to the condition they were in at the time of the pre-PV SOLAR FARM construction inventory.
  - x. All PV SOLAR FARM construction traffic shall exclusively use routes designated in the approved Transportation Impact Analysis.
  - y. The Applicant shall provide liability insurance in an acceptable amount to cover the required STREET construction activities.
  - z. The Applicant shall pay for the present worth costs of life consumed by the construction traffic as determined by the pavement management surveys and reports on the roads which do not show significant enough deterioration to warrant immediate restoration.
  - aa. Provisions for expiration date on the agreement.
  - bb. Other conditions that may be required.
- (2) A condition of the County Board SPECIAL USE Permit approval shall be that the Zoning Administrator shall not authorize a Zoning Use Permit for the PV SOLAR FARM until the County Engineer and State's Attorney, or Township Highway Commissioner, or municipality where relevant, has approved a Transportation Impact Analysis provided by the Applicant and prepared by an independent engineer that is mutually acceptable to the Applicant and the County Engineer and State's Attorney, or Township Highway Commissioner, or municipality where relevant, that includes the following:
- a. Identify all such public STREETS or portions thereof that are intended to be used by the Applicant during construction of the PV SOLAR FARM as well as the number of loads, per axle weight of each load, and type of equipment that will be used to transport each load.



**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- b. A schedule of the across road culverts and bridges affected by the project and the recommendations as to actions, if any, required with respect to such culverts and bridges and estimates of the cost to replace such culverts and bridges.
  - c. A schedule of the anticipated STREET repair costs to be made in advance of the PV SOLAR FARM construction and following construction of the PV SOLAR FARM.
  - d. The Applicant shall reimburse the County Engineer, or Township Highway Commissioner, or municipality where relevant, for all reasonable engineering fees including the cost of a third-party consultant, incurred in connection with the review and approval of the Transportation Impact Analysis.
- (3) At such time as decommissioning takes place, the Applicant or its successors in interest shall enter into a Roadway Use and Repair Agreement with the appropriate highway authority.
- H. Standard Conditions for Coordination with Local Fire Protection District
  - (1) The Applicant shall submit to the local fire protection district a copy of the site plan.
  - (2) Upon request by the local fire protection district, the Owner or Operator shall cooperate with the local fire protection district to develop the fire protection district's emergency response plan.
  - (3) Nothing in this section shall alleviate the need to comply with all other applicable fire laws and regulations.
- I. Standard Conditions for Allowable Noise Level
  - (1) Noise levels from any PV SOLAR FARM shall be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations (*35 Illinois Administrative Code*, Subtitle H: Noise, Parts 900, 901, 910).
  - (2) The Applicant shall submit manufacturer's sound power level characteristics and other relevant data regarding noise characteristics of proposed PV SOLAR FARM equipment necessary for a competent noise analysis.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (3) The Applicant, through the use of a qualified professional, as part of the siting approval application process, shall appropriately demonstrate compliance with the above noise requirements as follows:
  - a. The SPECIAL USE Permit application for other than a COMMUNITY PV SOLAR FARM shall include a noise analysis that includes the following:
    - (a) The pre-development 24-hour ambient background sound level shall be identified at representative locations near the site of the proposed PV SOLAR FARM.
    - (b) Computer modeling shall be used to generate the anticipated sound level resulting from the operation of the proposed PV SOLAR FARM within 1,500 feet of the proposed PV SOLAR FARM.
    - (c) Results of the ambient background sound level monitoring and the modeling of anticipated sound levels shall be clearly stated in the application and the application shall include a map of the modeled noise contours within 1,500 feet of the proposed PV SOLAR FARM.
    - (d) The application shall also clearly state the assumptions of the computer model's construction and algorithms so that a competent and objective third party can as simply as possible verify the anticipated sound data and sound levels.
  - b. For a COMMUNITY PV SOLAR FARM the Board may require submission of a noise analysis that meets the standard of paragraph 6.1.5I.(3)a.
- (4) After construction of the PV SOLAR FARM, the Zoning Administrator shall take appropriate enforcement action as necessary to investigate noise complaints in order to determine the validity of the complaints and take any additional enforcement action as proves warranted to stop any violation that is occurring, including but not limited to the following:
  - a. The Zoning Administrator shall make the Environment and Land Use Committee aware of complaints about noise that have been received by the Complaint Hotline.
  - b. If the Environment and Land Use Committee determines that the noise is excessive, the Environment and Land Use Committee shall require the Owner or Operator to take responsible steps to mitigate the excessive noise.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

J. Standard Conditions for Endangered Species Consultation

The Applicant shall apply for consultation with the Endangered Species Program of the Illinois Department of Natural Resources. The Application shall include a copy of the Agency Action Report from the Endangered Species Program of the Illinois Department of Natural Resources or, if applicable, a copy of the Detailed Action Plan Report submitted to the Endangered Species Program of the Illinois Department of Natural Resources and a copy of the response from the Illinois Department of Natural Resources.

K. Standard Conditions for Historic and Archaeological Resources Review

The Applicant shall apply for consultation with the State Historic Preservation Officer of the Illinois Department of Natural Resources. The Application shall include a copy of the Agency Action Report for the State Historic Preservation Officer of the Illinois Department of Natural Resources.

L. Standard Conditions for Acceptable Wildlife Impacts

The PV SOLAR FARM shall be located, designed, constructed, and operated so as to avoid and if necessary mitigate the impacts to wildlife to a sustainable level of mortality.

M. Screening and Fencing

(1) Perimeter fencing

- a. PV SOLAR FARM equipment and structures shall be fully enclosed and secured by a fence with a minimum height of 7 feet.
- b. Knox boxes and keys shall be provided at locked entrances for emergency personnel access.
- c. Vegetation between the fencing and the LOT LINE shall be maintained such that NOXIOUS WEEDS are controlled or eradicated consistent with the Illinois Noxious Weed Law (505 *ILCS* 100/1 *et. seq.*). Management of the vegetation shall be explained in the application.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

(2) Screening

- a. A visual screen shall be provided around the perimeter of the PV SOLAR FARM as follows:
  - (a) The visual screen shall be provided for any part of the PV SOLAR FARM that is visible to and located within 1,000 feet of an existing DWELLING or residential DISTRICT except that the visual screen may not be required within the full 1,000 feet of an existing DWELLING or residential DISTRICT provided the Applicant submits a landscape plan prepared by an Illinois Registered Landscape Architect and the BOARD finds that the visual screen in the landscape plan provides adequate screening. However, the visual screen shall not be required if the PV SOLAR FARM is not visible to a DWELLING or residential DISTRICT by virtue of the existing topography.
  - (b) The visual screen shall be waived if the owner(s) of a relevant DWELLING(S) have agreed in writing to waive the screening requirement and a copy of the written waiver is submitted to the BOARD or GOVERNING BODY.
  - (c) The visual screen shall be a vegetated buffer as follows:
    - i. A vegetated visual screen buffer that shall include a continuous line of native evergreen foliage and/or native shrubs and/or native trees and/or any existing wooded area and/or plantings of tall native grasses and other native flowering plants and/or an area of agricultural crop production that will conceal the PV SOLAR FARM from view from adjacent abutting property may be authorized as an alternative visual screen subject to specific conditions.
    - ii. Any vegetation that is part of the approved visual screen buffer shall be maintained in perpetuity of the PV SOLAR FARM. If the evergreen foliage below a height of 7 feet disappears over time, the screening shall be replaced.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- iii. The continuous line of native evergreen foliage and/or native shrubs and/or native trees shall be planted at a minimum height of 5 feet tall and shall be planted in multiple rows as required to provide a 50% screen within 2 years of planting. The planting shall otherwise conform to Natural Resources Conservation Service Practice Standard 380 Windbreak/Shelterbreak Establishment except that the planting shall be located as close as possible to the PV SOLAR FARM fence while still providing adequate clearance for maintenance.
- iv. A planting of tall native grasses and other native flowering plants may be used as a visual screen buffer for any PV module installation that is no more than 8 feet tall provided that the width of planting shall be authorized by the BOARD and the planting shall otherwise be planted and maintained per the recommendations of the Natural Resources Conservation Service Practice Standard 327 Conservation Cover and further provided that the PV SOLAR FARM perimeter fence is opaque.
- v. An area of agricultural crop production may also be authorized by the BOARD as an alternative visual screen buffer with a width of planting as authorized by the BOARD provided that the PV SOLAR FARM perimeter fence is opaque. Any area of crop production that is used as a vegetated visual screen shall be planted annually and shall be replanted as necessary to ensure a crop every year regardless of weather or market conditions.
- vi. Any vegetated screen buffer shall be detailed in a landscape plan drawing that shall be included with the PV SOLAR FARM SPECIAL USE Permit application.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

**N. Standard Conditions to Minimize Glare**

- (1) The design and construction of the PV SOLAR FARM shall minimize glare that may affect adjacent properties and the application shall include an explanation of how glare will be minimized.
- (2) After construction of the PV SOLAR FARM, the Zoning Administrator shall take appropriate enforcement action as necessary to investigate complaints of glare in order to determine the validity of the complaints and take any additional enforcement action as proves warranted to stop any significant glare that is occurring, including but not limited to the following:
  - a. The Zoning Administrator shall make the Environment and Land Use Committee aware of complaints about glare that have been received by the Complaint Hotline.
  - b. If the Environment and Land Use Committee determines that the glare is excessive, the Environment and Land Use Committee shall require the Owner or Operator to take reasonable steps to mitigate the excessive glare such as the installation of additional screening.

**O. Standard Condition for Liability Insurance**

- (1) The Owner or Operator of the PV SOLAR FARM shall maintain a current general liability policy covering bodily injury and property damage with minimum limits of at least \$5 million per occurrence and \$5 million in the aggregate.
- (2) The general liability policy shall identify landowners in the SPECIAL USE Permit as additional insured.

**P. Operational Standard Conditions**

- (1) Maintenance
  - a. The Owner or Operator of the PV SOLAR FARM must submit, on an annual basis, a summary of operation and maintenance reports to the Environment and Land Use Committee and any other operation and maintenance reports as the Environment and Land Use Committee reasonably requests.



**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- b. Any physical modification to the PV SOLAR FARM that increases the number of solar conversion devices or structures and/or the land area occupied by the PV SOLAR FARM shall require a new County BOARD SPECIAL USE Permit. Like-kind replacements shall not require recertification nor will replacement of transformers, cabling, etc. provided replacement is done in fashion similar to the original installation.
  - c. The Application shall explain methods and materials used to clean the PV SOLAR FARM equipment including an estimation of the daily and annual gallons of water used and the source of the water and management of wastewater. The BOARD may request copies of well records from the Illinois State Water Survey and may require an estimate by a qualified hydrogeologist of the likely impact on adjacent waterwells.
- (2) Materials Handling, Storage and Disposal
  - a. All solid wastes related to the construction, operation and maintenance of the PV SOLAR FARM shall be removed from the site promptly and disposed of in accordance with all Federal, State and local laws.
  - b. All hazardous materials related to the construction, operation and maintenance of the PV SOLAR FARM shall be handled, stored, transported and disposed of in accordance with all applicable local, State and Federal laws.
- (3) Vegetation management
  - a. The PV SOLAR FARM SPECIAL USE Permit application shall include a weed control plan for the total area of the SPECIAL USE Permit including areas both inside of and outside of the perimeter fencing.
  - b. The weed control plan shall ensure the control and/or eradication of NOXIOUS WEEDS consistent with the Illinois Noxious Weed Law (55 ILCS 100/1 *et. seq.*).
  - c. The weed control plan shall be explained in the application.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

**Q. Standard Condition for Decommissioning and Site Reclamation Plan**

- (1) The Applicant shall submit a signed decommissioning and site reclamation plan conforming to the requirements of paragraph 6.1.1A.
- (2) In addition to the purposes listed in subparagraph 6.1.1A.4., the decommissioning and site reclamation plan shall also include provisions for anticipated repairs to any public STREET used for the purpose of reclamation of the PV SOLAR FARM and all costs related to removal of access driveways.
- (3) The decommissioning and site reclamation plan required in paragraph 6.1.1A. shall also include the following:
  - a. A stipulation that the applicant or successor shall notify the GOVERNING BODY by certified mail of the commencement of voluntary or involuntary bankruptcy proceeding, naming the applicant as debtor, within ten days of commencement of proceeding.
  - b. A stipulation that the applicant shall agree that the sale, assignment in fact or law, or such other transfer of applicant's financial interest in the PV SOLAR FARM shall in no way affect or change the applicant's obligation to continue to comply with the terms of this plan. Any successor in interest, assignee, and all parties to the decommissioning and site reclamation plan shall assume the terms, covenants, and obligations of this plan and agrees to assume all reclamation liability and responsibility for the PV SOLAR FARM.
  - c. Authorization for the GOVERNING BODY and its authorized representatives for right of entry onto the PV SOLAR FARM premises for the purpose of inspecting the methods of reclamation or for performing actual reclamation if necessary.
  - d. A stipulation that at such time as decommissioning takes place the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan are required to enter into a Roadway Use and Repair Agreement with the relevant highway authority.
  - e. A stipulation that the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall provide evidence of any new, additional, or substitute financing or security agreement to the Zoning Administrator throughout the operating lifetime of the project.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- f. A stipulation that the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall be obliged to perform the work in the decommissioning and site reclamation plan before abandoning the PV SOLAR FARM or prior to ceasing production of electricity from the PV SOLAR FARM, after it has begun, other than in the ordinary course of business. This obligation shall be independent of the obligation to pay financial assurance and shall not be limited by the amount of financial assurance. The obligation to perform the reclamation work shall constitute a covenant running with the land.
- g. The decommissioning and site reclamation plan shall provide for payment of any associated costs that Champaign COUNTY may incur in the event that decommissioning is actually required. Associated costs include all administrative and ancillary costs associated with drawing upon the financial assurance and performing the reclamation work and shall include but not be limited to: attorney's fees; construction management and other professional fees; and the costs of preparing requests for proposals and bidding documents required to comply with State law or Champaign COUNTY purchasing policies.
- h. The depth of removal of foundation concrete below ground shall be a minimum of 54 inches. The depth of removal of foundation concrete shall be certified in writing by an Illinois Licensed Professional Engineer and the certification shall be submitted to the Zoning Administrator.
- i. Underground electrical cables of a depth of 5 feet or greater may be left in place.
- j. The hole resulting from the removal of foundation concrete during decommissioning shall be backfilled as follows:
  - (a) The excavation resulting from the removal of foundation concrete shall only be backfilled with subsoil and topsoil in similar depths and similar types as existed at the time of the original PV SOLAR FARM construction except that a lesser quality topsoil or a combination of a lesser quality topsoil and a subsoil that is similar to the native subsoil may be used at depths corresponding to the native subsoil but not less than 12 inches below grade.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (b) The native soils excavated at the time of the original PV SOLAR FARM construction may be used to backfill the concrete foundation excavations at the time of decommissioning provided that the soils are adequately stored throughout the operating lifetime of the PV SOLAR FARM. The methods for storing the excavated native soils during the operating lifetime of the PV SOLAR FARM shall be included in the decommissioning and site reclamation plan.
  - (c) If the excavated native soils are not stored for use for backfilling the concrete foundation excavations, a qualified soil scientist of Illinois Licensed Professional Engineer shall certify that the actual soils used to backfill the concrete foundation excavations are of equal or greater quality than the native soils or that, in the case of subsoil, the backfill soil meets the requirements of this paragraph. The certification shall be submitted to the Zoning Administrator.
  - (d) An Illinois Licensed Professional Engineer shall certify in writing that the concrete foundation excavations have been backfilled with soil to such a depth and with a minimum of compaction that is consistent with the restoration of productive agricultural use such that the depth of soil is expected to be no less than 54 inches within one year after backfilling.
- k. A stipulation that should the decommissioning and site reclamation plan be deemed invalid by a court of competent jurisdiction the PV SOLAR FARM SPECIAL USE Permit shall be deemed void.
- l. A stipulation that the Applicant's obligation to complete the decommissioning and site reclamation plan and to pay all associated costs shall be independent of the Applicant's obligation to provide financial assurance.
- m. A stipulation that the liability of the Applicant's failure to complete the decommissioning and site reclamation plan or any breach of the decommissioning and site reclamation plan requirement shall not be capped by the amount of financial assurance.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- n. If the Applicant desires to remove equipment or property credited to the estimated salvage value without the concurrent replacement of the property with property of equal or greater salvage value, or if the Applicant installs equipment or property increasing the cost of decommissioning after the PV SOLAR FARM begins to produce electricity, at any point, the Applicant shall first obtain the consent of the Zoning Administrator. If the Applicant's lien holders remove equipment or property credited to the salvage value, the Applicant shall promptly notify the Zoning Administrator. In either of these events, the total financial assurance shall be adjusted to reflect any change in total salvage value and total decommissioning costs resulting from any such removal or installation.
- (4) To comply with paragraph 6.1.1A.5., the Applicant shall provide financial assurance in the form of an irrevocable letter of credit as follows:
  - a. At the time of SPECIAL USE Permit approval, the amount of financial assurance to be provided for the decommissioning and site reclamation plan shall be 125% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Section 6.1.1A.4.a. and 6.1.1A.4.b., and 6.1.1A.4c. and shall otherwise be compliant with Section 6.1.1A.5. except that if the PV SOLAR FARM modules have an unlimited warranty of at least 10 years and also have a limited power warranty to provide not less than 80% nominal power output up to 25 years and proof of that warranty is provided at the time of Zoning Use Permit approval, financial assurance may be provided for the decommissioning and site reclamation plan as follows:
    - (a) No Zoning Use Permit to authorize construction of the PV SOLAR FARM shall be authorized by the Zoning Administrator until the PV SOLAR FARM owner shall provide the COUNTY with financial assurance to cover 12.5% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1A.4.a. and 6.1.1A.4.b. and 6.1.1A.4.c. and otherwise compliant with Section 6.1.1A.5.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (b) On or before the sixth anniversary of the Commercial Operation Date, the PV SOLAR FARM Owner shall provide the COUNTY with Financial Assurance to cover 62.5% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1A.4.a. and 6.1.1A.4.b. and 6.1.1A.4.c. and otherwise compliant with Section 6.1.1A.5.
  - (c) On or before the eleventh anniversary of the Commercial Operation Date, the PV SOLAR FARM Owner shall provide the COUNTY with Financial Assurance to cover 125% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1A.4.a. and 6.1.1A.4.b. and 6.1.1A.4.c. and otherwise compliant with Section 6.1.1A.5.
- b. Net salvage value may be deducted for decommissioning costs as follows:
  - (a) One of the following standards shall be met:
    - i. The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall maintain the PV SOLAR FARM free and clear of liens and encumbrances, including financing liens and shall provide proof of the same prior to issuance of the SPECIAL USE Permit; or
    - ii. The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall deduct from the salvage value credit the amount of any lien or encumbrance on the PV SOLAR FARM; or
    - iii. Any and all financing and/or financial security agreements entered into by the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall expressly provide that the agreements are subject to the covenant required by Section 6.1.1A.2 that the reclamation work be done.



**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (b) The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall provide proof of compliance with paragraph 6.1.5Q.4.b.(1). prior to the issuance of any Zoning Use Permit and upon every renewal of the financial assurance and at any other time upon the request of the Zoning Administrator.
- (c) The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall provide in the decommissioning and site reclamation plan for legal transfer of the STRUCTURE to the demolisher to pay the costs of reclamation work, should the reclamation work be performed.
- (d) The net estimated salvage value that is deducted from the estimated decommissioning costs shall be the salvage value that results after all related costs for demolition and any required preparation for transportation for reuse or recycling or for simple disposal and other similar costs including but not limited to the decommissioning of the PV SOLAR FARM STRUCTURES, equipment, and access roads.
- (e) Estimated salvage value shall be based on the average salvage price of the past five years as published in a reputable source for salvage values and shall reflect sound engineering judgement as to anticipated changes in salvage prices prior to the next update of estimated net salvage value.
- (f) The deduction from the estimated decommissioning costs for net estimated salvage value shall be capped at 70% of the total net estimated salvage value even though the total actual salvage value shall be available in the event that decommissioning is actually required.
- (g) The total financial assurance after deduction of the net estimated salvage value shall not be less than \$1,000 per acre.
- (h) The credit for net estimated salvage value attributable to any PV SOLAR FARM may not exceed the estimated cost of removal of the above-ground portion of that PV SOLAR FARM on the subject site.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- c. The GOVERNING BODY has the right to require multiple letters of credit based on the regulations governing federal insurance for deposits.
- d. The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall adjust the amount of the financial assurance to ensure that it reflects current and accurate information as follows:
  - (a) At least once every three years for the first 12 years of the financial assurance and at least once every two years thereafter or, if the PV SOLAR FARM modules have an unlimited warranty of a least 10 years and also have a limited power warranty to provide not less than 80% nominal power output up to 25 years and proof of that warranty is provided at the time of Zoning Use Permit approval, then at least once every five years for the first 25 years of the financial assurance and at least once every two years thereafter, the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall use an independent Illinois Licensed Professional Engineer to provide updated estimates of decommissioning costs and salvage value, by including any changes due to inflation and/or change in salvage price. The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall, upon receipt, provide a copy of the adjusted Professional Engineer's report to the Zoning Administrator.
  - (b) At all times, the value of the irrevocable letter of credit shall equal or exceed the amount of the independent engineer's cost estimate as increased by known and documented rates of inflation based on the Consumer Price Index since the PV SOLAR FARM was approved.
- e. The long-term corporate debt (credit) rating of the letter of credit issuing financial institution by both Standard & Poor's Financial Services LLC (S&P) and Moody's Investors Service (Moody's) shall be equal to or greater than the minimum acceptable long term corporate debt (credit) rating, as follows:
  - (a) The Zoning Administrator shall verify the long-term corporate debt (credit) rating of the proposed financial institution by Standard and Poor's Financial Services LLC (S&P) and/or Moody's Investors Service (Moody's) and/or the Kroll Bond Rating Agency.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (b) The minimum acceptable long term corporate debt (credit) rating of the proposed financial institution shall be a rating of “A-” by S&P or a rating of “A3” by Moody’s, or a rating of “A-” by Kroll Bond Rating Agency.
    - (c) Whenever the most current long term corporate debt (credit) rating of the proposed financial institution by either S&P, Moody’s, or Kroll Bond Rating Agency is lower than the minimum acceptable long term corporate debt (credit) rating, the letter of credit shall be replaced with a new irrevocable letter of credit from an issuing financial institution whose most current long term corporate debt (credit) rating by either S&P, Moody’s, or Kroll Bond Rating Agency meets or exceeds the minimum acceptable long term corporate debt (credit) rating.
  - f. At all times the value of the irrevocable letter of credit shall be increased annually as necessary to reflect actual rates of inflation over the life span of the PV SOLAR FARM and the amount shall be equal to or exceed 125% of the amount of the independent engineer’s cost estimate as increased by known and documented rates of inflation since the PV SOLAR FARM was approved.
  - g. Should the salvage value of components be adjusted downward or the decommissioning costs adjusted upward pursuant to paragraph 6.1.5Q.4.d., the amount of the irrevocable letter of credit pursuant to this paragraph 6.1.5Q.4. shall be increased to reflect the adjustment, as if the adjusted estimate were the initial estimate.
  - h. Any financial assurance required per the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5R. shall count towards the total financial assurance required for compliance with paragraph 6.1.1A.5.
  - i. Unless the Governing Body approves otherwise, the Champaign County State’s Attorney’s Office shall review and approve every Letter of Credit prior to acceptance by the Zoning Administrator.
- (5) In addition to the conditions listed in subparagraph 6.1.1A.9. the Zoning Administrator may also draw on the funds for the following reasons:
- a. In the event that any PV SOLAR FARM or component thereof ceases to be functional for more than six consecutive months after it starts producing electricity and the Owner is not diligently repairing such PV SOLAR FARM or component.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- b. In the event that the Owner declares the PV SOLAR FARM or any PV SOLAR FARM component to be functionally obsolete for tax purposes.
  - c. There is a delay in the construction of any PV SOLAR FARM of more than 6 months after construction on that PV SOLAR FARM begins.
  - d. Any PV SOLAR FARM or component thereof that appears in a state of disrepair or imminent collapse and/or creates an imminent threat to the health or safety of the public or any person.
  - e. Any PV SOLAR FARM or component thereof that is otherwise derelict for a period of 6 months.
  - f. The PV SOLAR FARM is in violation of the terms of the PV SOLAR FARM SPECIAL USE Permit for a period exceeding ninety (90) days.
  - g. The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan has failed to maintain financial assurance in the form and amount required by the SPECIAL USE Permit or compromised the COUNTY's interest in the decommissioning and site reclamation plan.
  - h. The COUNTY discovers any material misstatement of fact of misleading omission of fact made by the Applicant in the course of the SPECIAL USE Permit Zoning Case.
  - i. The Applicant has either failed to receive a copy of the certification of design compliance required by paragraph 6.1.5D. or failed to submit it to the COUNTY within 12 consecutive months of receiving a Zoning Use Permit regardless of the efforts of the Applicant to obtain such certification.
- (6) The Zoning Administrator may, but is not required to, deem the PV SOLAR FARM abandoned, or the standards set forth in Section 6.1.5Q.5. met, with respect to some, but not all, of the PV SOLAR FARM. In that event, the Zoning Administrator may draw upon the financial assurance to perform the reclamation work as to that portion of the PV SOLAR FARM only. Upon completion of that reclamation work, the salvage value and reclamation costs shall be recalculated as to the remaining PV SOLAR FARM.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (7) The decommissioning and site reclamation plan shall be included as a condition of approval by the Board and the signed and executed irrevocable letter of credit and evidence of the escrow account must be submitted to the Zoning Administrator prior to any Zoning Use Permit approval.
- R. Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
  - (1) If provided by state law, the Applicant shall enter into an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
  - (2) The Applicant shall bear full responsibility for coordinating any special conditions required in the SPECIAL USE Permit in order to ensure compliance with the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
  - (3) All requirements of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture shall become requirements of the COUNTY Board SPECIAL USE Permit.
  - (4) Champaign County shall have the right to enforce all requirements of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
- S. Complaint Hotline
  - (1) Prior to the commencement of construction on the PV SOLAR FARM and during the entire term of the COUNTY Board SPECIAL USE Permit and any extension, the Applicant and Owner shall establish a telephone number hotline for the general public to call with any complaints or questions.
  - (2) The telephone number hotline shall be publicized and posted at the operations and maintenance center and the construction marshalling yard.
  - (3) The telephone number hotline shall be manned during usual business hours and shall be an answering recording service during other hours.
  - (4) Each complaint call to the telephone number hotline shall be logged and identify the name and address of the caller and the reason for the call.
  - (5) All calls shall be recorded and the recordings shall be saved for transcription for a minimum of two years.



**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- (6) A copy of the telephone number hotline log shall be provided to the Zoning Administrator on a monthly basis.
- (7) The Applicant and Owner shall take necessary actions to resolve all legitimate complaints.

**T. Standard Conditions for Expiration of PV SOLAR FARM COUNTY Board SPECIAL USE Permit**

A PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.

**U. Application Requirements**

- (1) In addition to all other information required on the SPECIAL USE Permit application and required by Section 9.1.11A.2., the application shall contain or be accompanied by the following information:
  - a. A PV SOLAR FARM Project Summary, including, to the extent available:
    - (a) A general description of the project, including its approximate DC and AC generating capacity; the maximum number and type of solar devices, and the potential equipment manufacturer(s).
    - (b) The specific proposed location of the PV SOLAR FARM including all tax parcels on which the PV SOLAR FARM will be constructed.
    - (c) The specific proposed location of all tax parcels required to be included in the PV SOLAR FARM COUNTY Board SPECIAL USE Permit.
    - (d) A description of the Applicant, Owner and Operator, including their respective business structures.
  - b. The name(s), address(es), and phone number(s) of the Applicant(s), Owner and Operator, and all property owner(s) for the PV SOLAR FARM COUNTY Board SPECIAL USE Permit.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- c. A site plan for the PV SOLAR FARM indicating the following:
  - (a) The approximate planned location of al PV SOLAR FARM STRUCTURES, property lines (including identification of adjoining properties), required separations, public access roads and turnout locations, access driveways, solar devices, electrical inverter(s), electrical transformer(s), cabling, switching station, electrical cabling from the PV SOLAR FARM to the Substation(s), ancillary equipment, screening and fencing, third party transmission lines, meteorological station, maintenance and management facilities, and layout of all structures within the geographical boundaries of any applicable setback.
  - (b) The site plan shall clearly indicate the area of the proposed PV SOLAR FARM COUNTY Board SPECIAL USE Permit as required by subparagraph 6.1.5A.(1).
  - (c) The location of all below-ground wiring.
  - (d) The location, height, and appearance of all above-ground wiring and wiring structures.
  - (e) The separation of all PV SOLAR FARM structures from adjacent DWELLINGS and/or PRINCIPAL BUILDINGS or uses shall be dimensioned on the approved site plan and that dimension shall establish the effective minimum separation that shall be required for any Zoning Use Permit. Greater separation and somewhat different locations may be provided in the approved site plan for the Zoning Use Permit provided that the greater separation does not increase the noise impacts and/or glare that were approved in the PV SOLAR FARM COUNTY Board SPECIAL USE Permit. PV SOLAR FARM structures include substations, third party transmission lines, maintenance and management facilities, or other significant structures.
- d. All other required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance.

**SECTION 6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM COUNTY BOARD SPECIAL USE PERMIT – CONT.**

- e. The PV SOLAR FARM SPECIAL USE Permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE Permit application to any municipality within one-and-one-half miles of the proposed PV SOLAR FARM as required by Section 6.1.5B.(2)a.(b).
  - f. A municipal resolution regarding the PV SOLAR FARM by any municipality located within one-and-one-half miles of the PV SOLAR FARM must be submitted to the Zoning Administrator prior to the consideration of the PV SOLAR FARM SPECIAL USE Permit by the Champaign COUNTY Board or, in the absence of such a resolution, the Zoning Administrator shall provide documentation to the COUNTY Board that any municipality within one-and-one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the COUNTY Board as required by Section 6.1.5B.(2)a.(c).
  - g. Documentation of an executed interconnection agreement with the appropriate electric utility shall be provided prior to issuance of a Zoning Compliance Certificate to authorize operation of the PV SOLAR FARM as required by Section 6.1.5B.(3)b.
- (2) The Applicant shall notify the COUNTY of any changes to the information provided above that occurs while the COUNTY Board SPECIAL USE Permit application is pending.
  - (3) The Applicant shall include a copy of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture with the Zoning Use Permit Application to authorize construction.

## *EXHIBIT E: Agricultural Impact Mitigation Agreement*

# STANDARD AGRICULTURAL IMPACT MITIGATION AGREEMENT

between  
Nurmi Farm Solar, LLC

and the  
**ILLINOIS DEPARTMENT OF AGRICULTURE**  
Pertaining to the Construction of a Commercial Solar Energy Facility  
in  
Champaign County, Illinois

Pursuant to the Renewable Energy Facilities Agricultural Impact Mitigation Act (505 ILCS 147), the following standards and policies are required by the Illinois Department of Agriculture (IDOA) to help preserve the integrity of any Agricultural Land that is impacted by the Construction and Deconstruction of a Commercial Solar Energy Facility. They were developed with the cooperation of agricultural agencies, organizations, Landowners, Tenants, drainage contractors, and solar energy companies to comprise this Agricultural Impact Mitigation Agreement (AIMA).

Nurmi Farm Solar, LLC, hereafter referred to as Commercial Solar Energy Facility Owner, or simply as Facility Owner, plans to develop and/or operate a 5 MWac Commercial Solar Energy Facility in Champaign County [GPS Coordinates: 40.1949, -88.4340 ], which will consist of up to 37.95 acres that will be covered by solar facility related components, such as solar panel arrays, racking systems, access roads, an onsite underground collection system, inverters and transformers and any affiliated electric transmission lines. This AIMA is made and entered between the Facility Owner and the IDOA.

If Construction does not commence within four years after this AIMA has been fully executed, this AIMA shall be revised, with the Facility Owner's input, to reflect the IDOA's most current Solar Farm Construction and Deconstruction Standards and Policies. This AIMA, and any updated AIMA, shall be filed with the County Board by the Facility Owner prior to the commencement of Construction.

The below prescribed standards and policies are applicable to Construction and Deconstruction activities occurring partially or wholly on privately owned agricultural land.

## **Conditions of the AIMA**

The mitigative actions specified in this AIMA shall be subject to the following conditions:

- A. All Construction or Deconstruction activities may be subject to County or other local requirements. However, the specifications outlined in this AIMA shall be the minimum standards applied to all Construction or Deconstruction activities. IDOA may utilize any legal means to enforce this AIMA.
- B. Except for Section 17. B. through F., all actions set forth in this AIMA are subject to modification through negotiation by Landowners and the Facility Owner, provided such changes are negotiated in advance of the respective Construction or Deconstruction activities.
- C. The Facility Owner may negotiate with Landowners to carry out the actions that Landowners wish to perform themselves. In such instances, the Facility Owner shall offer Landowners the area commercial rate for their machinery and labor costs.



- D. All provisions of this AIMA shall apply to associated future Construction, maintenance, repairs, and Deconstruction of the Facility referenced by this AIMA.
- E. The Facility Owner shall keep the Landowners and Tenants informed of the Facility's Construction and Deconstruction status, and other factors that may have an impact upon their farming operations.
- F. The Facility Owner shall include a statement of its adherence to this AIMA in any environmental assessment and/or environmental impact statement.
- G. Execution of this AIMA shall be made a condition of any Conditional/Special Use Permit. Not less than 30 days prior to the commencement of Construction, a copy of this AIMA shall be provided by the Facility Owner to each Landowner that is party to an Underlying Agreement. In addition, this AIMA shall be incorporated into each Underlying Agreement.
- H. The Facility Owner shall implement all actions to the extent that they do not conflict with the requirements of any applicable federal, state and local rules and regulations and other permits and approvals that are obtained by the Facility Owner for the Facility.
- I. No later than 45 days prior to the Construction and/or Deconstruction of a Facility, the Facility Owner shall provide the Landowner(s) with a telephone number the Landowner can call to alert the Facility Owner should the Landowner(s) have questions or concerns with the work which is being done or has been carried out on his/her property.
- J. If there is a change in ownership of the Facility, the Facility Owner assuming ownership of the Facility shall provide written notice within 90 days of ownership transfer, to the Department, the County, and to Landowners of such change. The Financial Assurance requirements and the other terms of this AIMA shall apply to the new Facility Owner.
- K. The Facility Owner shall comply with all local, state and federal laws and regulations, specifically including the worker protection standards to protect workers from pesticide exposure.
- L. Within 30 days of execution of this AIMA, the Facility Owner shall use Best Efforts to provide the IDOA with a list of all Landowners that are party to an Underlying Agreement and known Tenants of said Landowner who may be affected by the Facility. As the list of Landowners and Tenants is updated, the Facility Owner shall notify the IDOA of any additions or deletions.
- M. If any provision of this AIMA is held to be unenforceable, no other provision shall be affected by that holding, and the remainder of the AIMA shall be interpreted as if it did not contain the unenforceable provision.

### **Definitions**

**Abandonment**

When Deconstruction has not been completed within 12 months after the Commercial Solar Energy Facility reaches the end of its useful life. For purposes of this definition, a Commercial Solar Energy Facility shall be presumed to have reached the end of its useful life if the Commercial Solar Energy Facility Owner fails, for a period of 6 consecutive months, to pay the Landowner amounts owed in accordance with an Underlying Agreement.

Aboveground Cable	Electrical power lines installed above ground surface to be utilized for conveyance of power from the solar panels to the solar facility inverter and/or point of interconnection to utility grid or customer electric meter.
Agricultural Impact Mitigation Agreement (AIMA)	The Agreement between the Facility Owner and the Illinois Department of Agriculture (IDOA) described herein.
Agricultural Land	Land used for Cropland, hayland, pastureland, managed woodlands, truck gardens, farmsteads, commercial ag-related facilities, feedlots, livestock confinement systems, land on which farm buildings are located, and land in government conservation programs used for purposes as set forth above.
Best Efforts	Diligent, good faith, and commercially reasonable efforts to achieve a given objective or obligation.
Commercial Operation Date	The calendar date of which the Facility Owner notifies the Landowner, County, and IDOA in writing that commercial operation of the facility has commenced. If the Facility Owner fails to provide such notifications, the Commercial Operation Date shall be the execution date of this AIMA plus 6 months.
Commercial Solar Energy Facility (Facility)	A solar energy conversion facility equal to or greater than 500 kilowatts in total nameplate capacity, including a solar energy conversion facility seeking an extension of a permit to construct granted by a county or municipality before June 29, 2018. "Commercial solar energy facility" does not include a solar energy conversion facility: (1) for which a permit to construct has been issued before June 29, 2018; (2) that is located on land owned by the commercial solar energy facility owner; (3) that was constructed before June 29, 2018; or (4) that is located on the customer side of the customer's electric meter and is primarily used to offset that customer's electricity load and is limited in nameplate capacity to less than or equal to 2,000 kilowatts.
Commercial Solar Energy Facility Owner deemed (Facility Owner)	A person or entity that owns a commercial solar energy facility. A Commercial Solar Energy Facility Owner is not nor shall it be to be a public utility as defined in the Public Utilities Act.
County	The County or Counties where the Commercial Solar Energy Facility is located.
Construction	The installation, preparation for installation and/or repair of a Facility.
Cropland	Land used for growing row crops, small grains or hay; includes land which was formerly used as cropland, but is currently enrolled in a government conservation program; also includes pastureland that is classified as Prime Farmland.

Deconstruction	The removal of a Facility from the property of a Landowner and the restoration of that property as provided in the AIMA.
Deconstruction Plan	<p>A plan prepared by a Professional Engineer, at the Facility's expense, that includes:</p> <ol style="list-style-type: none"><li>(1) the estimated Deconstruction cost, in current dollars at the time of filing, for the Facility, considering among other things:<ol style="list-style-type: none"><li>i. the number of solar panels, racking, and related facilities involved;</li><li>ii. the original Construction costs of the Facility;</li><li>iii. the size and capacity, in megawatts of the Facility;</li><li>iv. the salvage value of the facilities (if all interests in salvage value are subordinate to that of the Financial Assurance holder if abandonment occurs);</li><li>v. the Construction method and techniques for the Facility and for other similar facilities; and</li></ol></li><li>(2) a comprehensive detailed description of how the Facility Owner plans to pay for the Deconstruction of the Facility.</li></ol>
Department	The Illinois Department of Agriculture (IDOA).
Financial Assurance	A reclamation or surety bond or other commercially available financial assurance that is acceptable to the County, with the County or Landowner as beneficiary.
Landowner	Any person with an ownership interest in property that is used for agricultural purposes and that is party to an Underlying Agreement.
Prime Farmland	Agricultural Land comprised of soils that are defined by the USDA Natural Resources Conservation Service (NRCS) as "Prime Farmland" (generally considered to be the most productive soils with the least input of nutrients and management).
Professional Engineer	An engineer licensed to practice engineering in the State of Illinois.
Soil and Water Conservation District (SWCD)	A unit of local government that provides technical and financial assistance to eligible Landowners for the conservation of soil and water resources.
Tenant	Any person, apart from the Facility Owner, lawfully residing or leasing/renting land that is subject to an Underlying Agreement.
Topsoil	The uppermost layer of the soil that has the darkest color or the highest content of organic matter; more specifically, it is defined as the "A" horizon.
Underlying Agreement	The written agreement between the Facility Owner and the Landowner(s) including, but not limited to, an easement, option, lease, or license under the terms of which another person has constructed, constructs, or intends to construct a Facility on the property of the Landowner.

Underground Cable	Electrical power lines installed below the ground surface to be utilized for conveyance of power within a Facility or from a Commercial Solar Energy Facility to the electric grid.
USDA Natural Resources Conservation Service (NRCS)	An agency of the United States Department of Agriculture that provides America's farmers with financial and technical assistance to aid with natural resources conservation.

### **Construction and Deconstruction Standards and Policies**

#### **1. Support Structures**

- A. Only single pole support structures shall be used for the Construction and operation of the Facility on Agricultural Land. Other types of support structures, such as lattice towers or H-frames, may be used on nonagricultural land.
- B. Where a Facility's Aboveground Cable will be adjacent and parallel to highway and/or railroad right-of-way, but on privately owned property, the support structures shall be placed as close as reasonably practicable and allowable by the applicable County Engineer or other applicable authorities to the highway or railroad right-of-way. The only exceptions may be at jogs or weaves on the highway alignment or along highways or railroads where transmission and distribution lines are already present.
- C. When it is not possible to locate Aboveground Cable next to highway or railroad right-of-way, Best Efforts shall be expended to place all support poles in such a manner to minimize their placement on Cropland (i.e., longer than normal above ground spans shall be utilized when traversing Cropland).

#### **2. Aboveground Facilities**

Locations for facilities shall be selected in a manner that is as unobtrusive as reasonably possible to ongoing agricultural activities occurring on the land that contains or is adjacent to the Facility.

#### **3. Guy Wires and Anchors**

Best Efforts shall be made to place guy wires and their anchors, if used, out of Cropland, pastureland and hayland, placing them instead along existing utilization lines and on land other than Cropland. Where this is not feasible, Best Efforts shall be made to minimize guy wire impact on Cropland. All guy wires shall be shielded with highly visible guards.

#### **4. Underground Cabling Depth**

- A. Underground electrical cables located outside the perimeter of the (fence) of the solar panels shall be buried with:
  1. a minimum of 5 feet of top cover where they cross Cropland.
  2. a minimum of 5 feet of top cover where they cross pastureland or other non-Cropland classified as Prime Farmland.
  3. a minimum of 3 feet of top cover where they cross pastureland and other Agricultural Land not classified as Prime Farmland.

4. a minimum of 3 feet of top cover where they cross wooded/brushy land.
  - B. Provided that the Facility Owner removes the cables during Deconstruction, underground electric cables may be installed to a minimum depth of 18 inches:
    1. Within the fenced perimeter of the Facility; or
    2. When buried under an access road associated with the Facility provided that the location and depth of cabling is clearly marked at the surface.
  - C. If Underground Cables within the fenced perimeter of the solar panels are installed to a minimum depth of 5 feet, they may remain in place after Deconstruction.
- 5. Topsoil Removal and Replacement**
- A. Any excavation shall be performed in a manner to preserve topsoil. Best Efforts shall be made to store the topsoil near the excavation site in such a manner that it will not become intermixed with subsoil materials.
  - B. Best Efforts shall be made to store all disturbed subsoil material near the excavation site and separate from the topsoil.
  - C. When backfilling an excavation site, Best Efforts shall be used to ensure the stockpiled subsoil material will be placed back into the excavation site before replacing the topsoil.
  - D. Refer to Section 7 for procedures pertaining to rock removal from the subsoil and topsoil.
  - E. Refer to Section 8 for procedures pertaining to the repair of compaction and rutting of the topsoil.
  - F. Best Efforts shall be performed to place the topsoil in a manner so that after settling occurs, the topsoil's original depth and contour will be restored as close as reasonably practicable. The same shall apply where excavations are made for road, stream, drainage ditch, or other crossings. In no instance shall the topsoil materials be used for any other purpose unless agreed to explicitly and in writing by the Landowner.
  - G. Based on the mutual agreement of the landowner and Facility Owner, excess soil material resulting from solar facility excavation shall either be removed or stored on the Landowner's property and reseeded per the applicable National Pollution Discharge Elimination System (NPDES) permit/Stormwater Pollution Prevention Plan (SWPPP). After the Facility reaches the end of its Useful Life, the excess subsoil material shall be returned to an excavation site or removed from the Landowner's property, unless otherwise agreed to by Landowner.
- 6. Rerouting and Permanent Repair of Agricultural Drainage Tiles**
- The following standards and policies shall apply to underground drainage tile line(s) directly or indirectly affected by Construction and/or Deconstruction:
- A. Prior to Construction, the Facility Owner shall work with the Landowner to identify drainage tile lines traversing the property subject to the Underlying Agreement to the extent reasonably practicable. All drainage tile lines identified in this manner shall be shown on the Construction and Deconstruction Plans.



- B. The location of all drainage tile lines located adjacent to or within the footprint of the Facility shall be recorded using Global Positioning Systems (GPS) technology. Within 60 days after Construction is complete, the Facility Owner shall provide the Landowner, the IDOA, and the respective County Soil and Water Conservation District (SWCD) with "as built" drawings (strip maps) showing the location of all drainage tile lines by survey station encountered in the Construction of the Facility, including any tile line repair location(s), and any underground cable installed as part of the Facility.

**C. Maintaining Surrounding Area Subsurface Drainage**

If drainage tile lines are damaged by the Facility, the Facility Owner shall repair the lines or install new drainage tile line(s) of comparable quality and cost to the original(s), and of sufficient size and appropriate slope in locations that limit direct impact from the Facility. If the damaged tile lines cause an unreasonable disruption to the drainage system, as determined by the Landowner, then such repairs shall be made promptly to ensure appropriate drainage. Any new line(s) may be located outside of, but adjacent to the perimeter of the Facility. Disrupted adjacent drainage tile lines shall be attached thereto to provide an adequate outlet for the disrupted adjacent tile lines.

**D. Re-establishing Subsurface Drainage Within Facility Footprint**

Following Deconstruction and using Best Efforts, if underground drainage tile lines were present within the footprint of the facility and were severed or otherwise damaged during original Construction, facility operation, and/or facility Deconstruction, the Facility Owner shall repair existing drainage tiles or install new drainage tile lines of comparable quality and cost to the original, within the footprint of the Facility with sufficient capacity to restore the underground drainage capacity that existed within the footprint of the Facility prior to Construction. Such installation shall be completed within 12 months after the end of the useful life of the Facility and shall be compliant with Figures 1 and 2 to this Agreement or based on prudent industry standards if agreed to by Landowner.

- E. If there is any dispute between the Landowner and the Facility Owner on the method of permanent drainage tile line repair, the appropriate County SWCD's opinion shall be considered by the Facility Owner and the Landowner.
- F. During Deconstruction, all additional permanent drainage tile line repairs beyond those included above in Section 6.D. must be made within 30 days of identification or notification of the damage, weather and soil conditions permitting. At other times, such repairs must be made at a time mutually agreed upon by the Facility Owner and the Landowner. If the Facility Owner and Landowner cannot agree upon a reasonable method to complete this restoration, the Facility Owner may implement the recommendations of the appropriate County SWCD and such implementation constitutes compliance with this provision.
- G. Following completion of the work required pursuant to this Section, the Facility Owner shall be responsible for correcting all drainage tile line repairs that fail due to Construction and/or Deconstruction for one year following the completion of Construction or Deconstruction, provided those repairs were made by the Facility Owner. The Facility Owner shall not be responsible for drainage tile repairs that the Facility Owner pays the Landowner to perform.

**7. Rock Removal**

With any excavations, the following rock removal procedures pertain only to rocks found in the uppermost 42 inches of soil, the common freeze zone in Illinois, which emerged or were brought to the site as a result of Construction and/or Deconstruction.

- A. Before replacing any topsoil, Best Efforts shall be taken to remove all rocks greater than 3 inches in any dimension from the surface of exposed subsoil which emerged or were brought to the site as a result of Construction and/or Deconstruction.
- B. If trenching, blasting, or boring operations are required through rocky terrain, precautions shall be taken to minimize the potential for oversized rocks to become interspersed in adjacent soil material.
- C. Rocks and soil containing rocks removed from the subsoil areas, topsoil, or from any excavations, shall be removed from the Landowner's premises or disposed of on the Landowner's premises at a location that is mutually acceptable to the Landowner and the Facility Owner.

**8. Repair of Compaction and Rutting**

- A. Unless the Landowner opts to do the restoration work on compaction and rutting, after the topsoil has been replaced post-Deconstruction, all areas within the boundaries of the Facility that were traversed by vehicles and Construction and/or Deconstruction equipment that exhibit compaction and rutting shall be restored by the Facility Owner. All prior Cropland shall be ripped at least 18 inches deep or to the extent practicable, and all pasture and woodland shall be ripped at least 12 inches deep or to the extent practicable. The existence of drainage tile lines or underground utilities may necessitate less ripping depth. The disturbed area shall then be disked.
- B. All ripping and disking shall be done at a time when the soil is dry enough for normal tillage operations to occur on Cropland adjacent to the Facility.
- C. The Facility Owner shall restore all rutted land to a condition as close as possible to its original condition upon Deconstruction, unless necessary earlier as determined by the Landowner.
- D. If there is any dispute between the Landowner and the Facility Owner as to what areas need to be ripped/disked or the depth at which compacted areas should be ripped/disked, the appropriate County SWCD's opinion shall be considered by the Facility Owner and the Landowner.

**9. Construction During Wet Weather**

Except as provided below, construction activities are not allowed on agricultural land during times when normal farming operations, such as plowing, disking, planting or harvesting, cannot take place due to excessively wet soils. With input from the landowner, wet weather conditions may be determined on a field by field basis.

- A. Construction activities on prepared surfaces, surfaces where topsoil and subsoil have been removed, heavily compacted in preparation, or otherwise stabilized (e.g. through cement mixing) may occur at the discretion of the Facility Owner in wet weather conditions.

- B. Construction activities on unprepared surfaces will be done only when work will not result in rutting which may mix subsoil and topsoil. Determination as to the potential of subsoil and topsoil mixing will be made in consultation with the underlying Landowner, or, if approved by the Landowner, his/her designated tenant or designee.

**10. Prevention of Soil Erosion**

- A. The Facility Owner shall work with Landowners and create and follow a SWPPP to prevent excessive erosion on land that has been disturbed by Construction or Deconstruction of a Facility.
- B. If the Landowner and Facility Owner cannot agree upon a reasonable method to control erosion on the Landowner's property, the Facility Owner shall consider the recommendations of the appropriate County SWCD to resolve the disagreement.
- C. The Facility Owner may, per the requirements of the project SWPPP and in consultation with the Landowner, seed appropriate vegetation around all panels and other facility components to prevent erosion. The Facility Owner must utilize Best Efforts to ensure that all seed mixes will be as free of any noxious weed seeds as possible. The Facility Owner shall consult with the Landowner regarding appropriate varieties to seed.

**11. Repair of Damaged Soil Conservation Practices**

Consultation with the appropriate County SWCD by the Facility Owner shall be carried out to determine if there are soil conservation practices (such as terraces, grassed waterways, etc.) that will be damaged by the Construction and/or Deconstruction of the Facility. Those conservation practices shall be restored to their preconstruction condition as close as reasonably practicable following Deconstruction in accordance with USDA NRCS technical standards. All repair costs shall be the responsibility of the Facility Owner.

**12. Compensation for Damages to Private Property**

The Facility Owner shall reasonably compensate Landowners for damages caused by the Facility Owner. Damage to Agricultural Land shall be reimbursed to the Landowner as prescribed in the applicable Underlying Agreement.

**13. Clearing of Trees and Brush**

- A. If trees are to be removed for the Construction or Deconstruction of a Facility, the Facility Owner shall consult with the Landowner to determine if there are trees of commercial or other value to the Landowner.
- B. If there are trees of commercial or other value to the Landowner, the Facility Owner shall allow the Landowner the right to retain ownership of the trees to be removed and the disposition of the removed trees shall be negotiated prior to the commencement of land clearing.

**14. Access Roads**

- A. To the extent practicable, access roads shall be designed to not impede surface drainage and shall be built to minimize soil erosion on or near the access roads.

- B. Access roads may be left intact during Construction, operation or Deconstruction through mutual agreement of the Landowner and the Facility Owner unless otherwise restricted by federal, state, or local regulations.
- C. If the access roads are removed, Best Efforts shall be expended to assure that the land shall be restored to equivalent condition(s) as existed prior to their construction, or as otherwise agreed to by the Facility Owner and the Landowner. All access roads that are removed shall be ripped to a depth of 18 inches. All ripping shall be performed consistent with Section 8.

**15. Weed/Vegetation Control**

- A. The Facility Owner shall provide for weed control in a manner that prevents the spread of weeds. Chemical control, if used, shall be done by an appropriately licensed pesticide applicator.
- B. The Facility Owner shall be responsible for the reimbursement of all reasonable costs incurred by owners of agricultural land where it has been determined by the appropriate state or county entity that weeds have spread from the Facility to their property. Reimbursement is contingent upon written notice to the Facility Owner. Facility Owner shall reimburse the property owner within 45 days after notice is received.
- C. The Facility Owner shall ensure that all vegetation growing within the perimeter of the Facility is properly and appropriately maintained. Maintenance may include, but not be limited to, mowing, trimming, chemical control, or the use of livestock as agreed to by the Landowner.
- D. The Deconstruction plans must include provisions for the removal of all weed control equipment used in the Facility, including weed-control fabrics or other ground covers.

**16. Indemnification of Landowners**

The Facility Owner shall indemnify all Landowners, their heirs, successors, legal representatives, and assigns from and against all claims, injuries, suits, damages, costs, losses, and reasonable expenses resulting from or arising out of the Commercial Solar Energy Facility, including Construction and Deconstruction thereof, and also including damage to such Facility or any of its appurtenances, except where claims, injuries, suits, damages, costs, losses, and expenses are caused by the negligence or intentional acts, or willful omissions of such Landowners, and/or the Landowners heirs, successors, legal representatives, and assigns.

**17. Deconstruction Plans and Financial Assurance of Commercial Solar Energy Facilities**

- A. Deconstruction of a Facility shall include the removal/disposition of all solar related equipment/facilities, including the following utilized for operation of the Facility and located on Landowner property:
  - 1. Solar panels, cells and modules;
  - 2. Solar panel mounts and racking, including any helical piles, ground screws, ballasts, or other anchoring systems;
  - 3. Solar panel foundations, if used (to depth of 5 feet);

4. Transformers, inverters, energy storage facilities, or substations, including all components and foundations; however, Underground Cables at a depth of 5 feet or greater may be left in place;
  5. Overhead collection system components;
  6. Operations/maintenance buildings, spare parts buildings and substation/switching gear buildings unless otherwise agreed to by the Landowner;
  7. Access Road(s) unless Landowner requests in writing that the access road is to remain;
  8. Operation/maintenance yard/staging area unless otherwise agreed to by the Landowner; and
  9. Debris and litter generated by Deconstruction and Deconstruction crews.
- B. The Facility Owner shall, at its expense, complete Deconstruction of a Facility within twelve (12) months after the end of the useful life of the Facility.
- C. During the County permit process, or if none, then prior to the commencement of construction, the Facility Owner shall file with the County a Deconstruction Plan. The Facility Owner shall file an updated Deconstruction Plan with the County on or before the end of the tenth year of commercial operation.
- D. The Facility Owner shall provide the County with Financial Assurance to cover the estimated costs of Deconstruction of the Facility. Provision of this Financial Assurance shall be phased in over the first 11 years of the Project's operation as follows:
1. On or before the first anniversary of the Commercial Operation Date, the Facility Owner shall provide the County with Financial Assurance to cover ten (10) percent of the estimated costs of Deconstruction of the Facility as determined in the Deconstruction Plan.
  2. On or before the sixth anniversary of the Commercial Operation Date, the Facility Owner shall provide the County with Financial Assurance to cover fifty (50) percent of the estimated costs of Deconstruction of the Facility as determined in the Deconstruction Plan.
  3. On or before the eleventh anniversary of the Commercial Operation Date, the Facility Owner shall provide the County with Financial Assurance to cover one hundred (100) percent of the estimated costs of Deconstruction of the Facility as determined in the updated Deconstruction Plan provided during the tenth year of commercial operation.

The Financial Assurance shall not release the surety from liability until the Financial Assurance is replaced. The salvage value of the Facility may only be used to reduce the estimated costs of Deconstruction if the County agrees that all interests in the salvage value are subordinate or have been subordinated to that of the County if Abandonment occurs.



- E. The County may, but is not required to, reevaluate the estimated costs of Deconstruction of any Facility after the tenth anniversary, and every five years thereafter, of the Commercial Operation Date. Based on any reevaluation, the County may require changes in the level of Financial Assurance used to calculate the phased Financial Assurance levels described in Section 17.D. required from the Facility Owner. If the County is unable to its satisfaction to perform the investigations necessary to approve the Deconstruction Plan filed by the Facility Owner, then the County and Facility may mutually agree on the selection of a Professional Engineer independent of the Facility Owner to conduct any necessary investigations. The Facility Owner shall be responsible for the cost of any such investigations.
- F. Upon Abandonment, the County may take all appropriate actions for Deconstruction including drawing upon the Financial Assurance.


**Concurrence of the Parties to this AIMA**

The Illinois Department of Agriculture and Nurmi Farm Solar, LLC concur that this AIMA is the complete AIMA governing the mitigation of agricultural impacts that may result from the Construction and Deconstruction of the solar farm project in Champaign County within the State of Illinois.

The effective date of this AIMA commences on the date of execution.

**STATE OF ILLINOIS  
DEPARTMENT OF AGRICULTURE**

  
By: Jerry Costello II, Director 4

  
By ~~Tess Feagans, General Counsel~~  
Clay Nordieck, Deputy General Counsel

801 E. Sangamon Avenue, 62702  
State Fairgrounds, POB 19281 Springfield,  
IL 62794-9281

12/20, 2023

**Nurmi Farm Solar, LLC**

DocuSigned by:  
  
5640DE2C7A73450

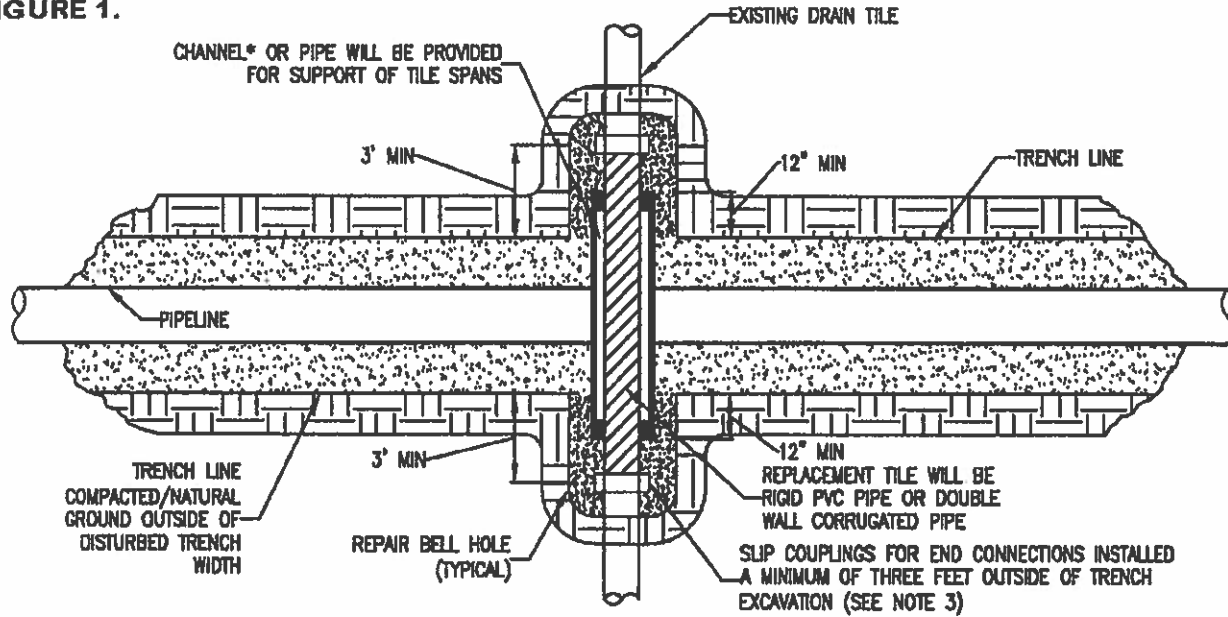
By Bridget Callahan

1000 Wilson Blvd #2400,  
Arlington, VA 22209

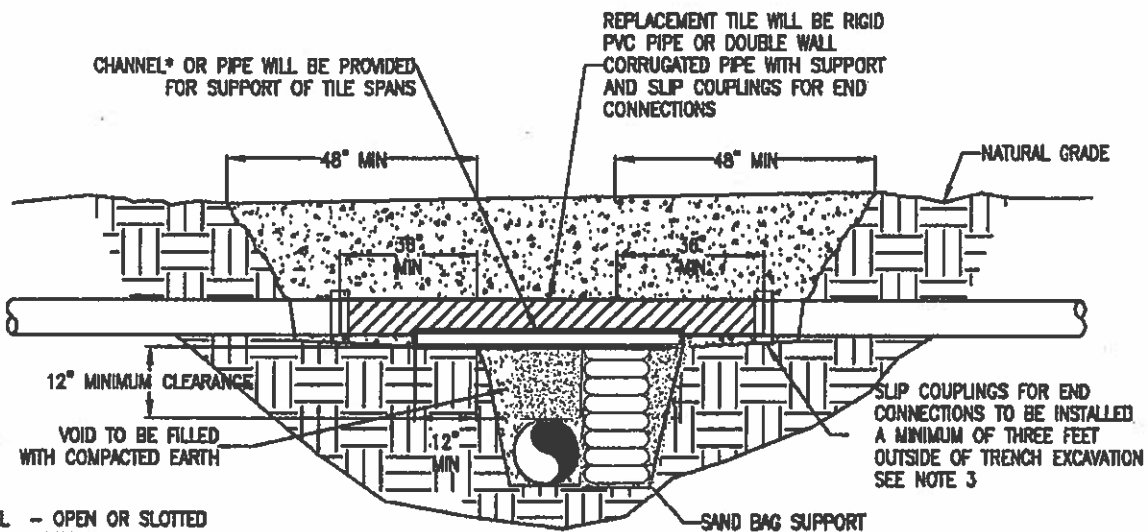
Address

December 11th, 2023

**FIGURE 1.**



**PLAN**  
N.T.S.



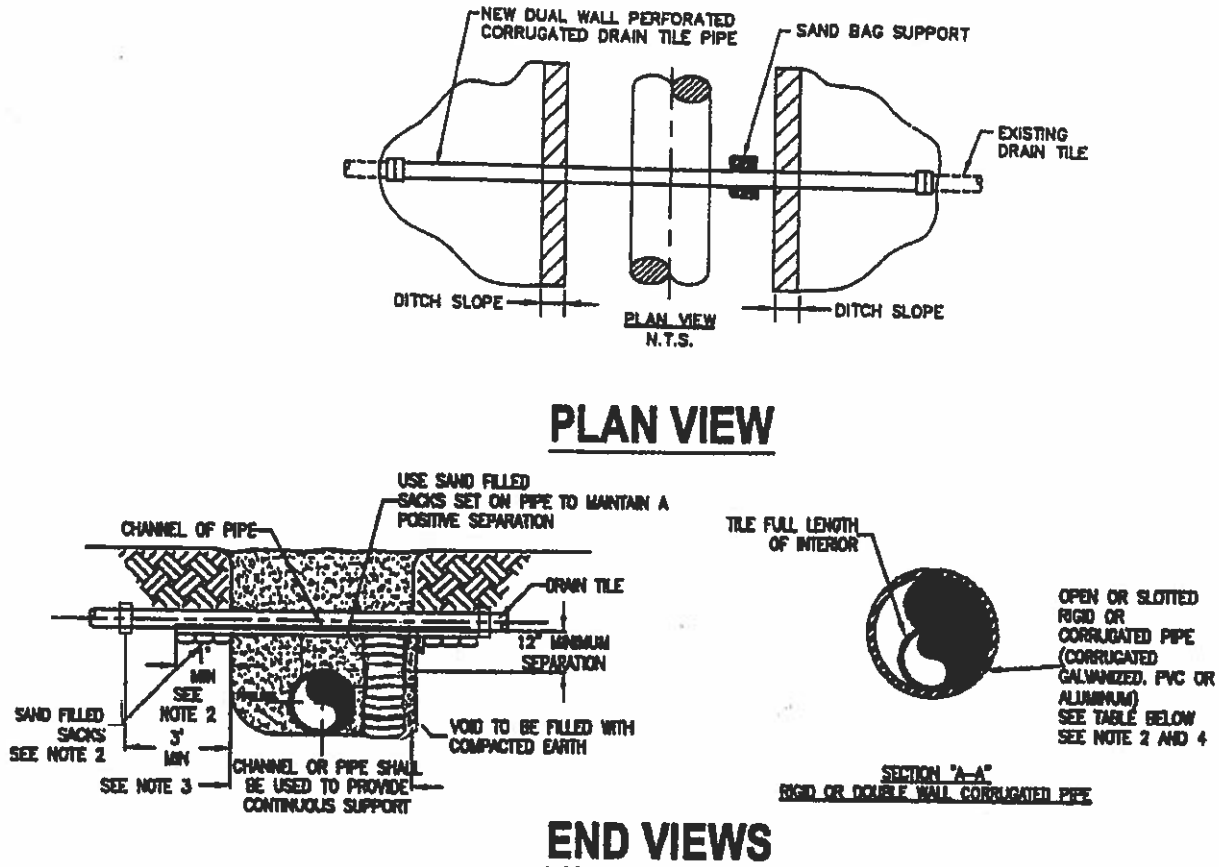
**CROSS SECTION**  
N.T.S.

**NOTE:**

1. IMMEDIATELY REPAIR TILE IF WATER IS FLOWING THROUGH TILE AT TIME OF TRENCHING. IF NO WATER IS FLOWING AND TEMPORARY REPAIR IS DELAYED, OR NOT MADE BY THE END OF THE WORK DAY, A SCREEN OR APPROPRIATE 'NIGHT CAP' SHALL BE PLACED ON OPEN ENDS OF TILE TO PREVENT ENTRAPMENT OF ANIMALS ETC.
2. CHANNEL OR PIPE (OPEN OR SLOTTED) MADE OF CORRUGATED GALVANIZED PIPE, PVC OR ALUMINUM WILL BE USED FOR SUPPORT OF DRAIN TILE SPANS.
3. INDUSTRY STANDARDS SHALL BE FOLLOWED TO ENSURE PROPER SEAL OF REPAIRED DRAIN TILES.

# **TEMPORARY DRAIN TILE REPAIR**

**FIGURE 2.**



MINIMUM SUPPORT TABLE			
TILE SIZE	CHANNEL SIZE	PIPE SIZE	
3"	4" @ 5.4 #/ft	4"	STD. WT.
4"-5"	5" @ 6.7 #/ft	6"	STD. WT.
6"-8"	7" @ 9.8 #/ft	8"-10"	STD. WT.
10"	10" @ 15.3 #/ft	12"	STD. WT.

**NOTE:**

1. TILE REPAIR AND REPLACEMENT SHALL MAINTAIN ORIGINAL ALIGNMENT GRADIENT AND WATER FLOW TO THE GREATEST EXTENT POSSIBLE. IF THE TILE NEEDS TO BE RELOCATED, THE INSTALLATION ANGLE MAY VARY DUE TO SITE SPECIFIC CONDITIONS AND LANDOWNER RECOMMENDATIONS.
2. 1'-0" MINIMUM LENGTH OF CHANNEL OR RIGID PIPE (OPEN OR SLOTTED CORRUGATED GALVANIZED, PVC OR ALUMINUM CRADLE) SHALL BE SUPPORTED BY UNDISTURBED SOIL, OR IF CROSSING IS NOT AT RIGHT ANGLES TO PIPELINE, EQUIVALENT LENGTH PERPENDICULAR TO TRENCH. SHIM WITH SAND BAGS TO UNDISTURBED SOIL FOR SUPPORT AND DRAINAGE GRADIENT MAINTENANCE (TYPICAL BOTH SIDES).
3. DRAIN TILES WILL BE PERMANENTLY CONNECTED TO EXISTING DRAIN TILES A MINIMUM OF THREE FEET OUTSIDE OF EXCAVATED TRENCH LINE USING INDUSTRY STANDARDS TO ENSURE PROPER SEAL OF REPAIRED DRAIN TILES INCLUDING SLIP COUPLINGS.
4. DIAMETER OF RIGID PIPE SHALL BE OF ADEQUATE SIZE TO ALLOW FOR THE INSTALLATION OF THE TILE FOR THE FULL LENGTH OF THE RIGID PIPE.
5. OTHER METHODS OF SUPPORTING DRAIN TILE MAY BE USED IF ALTERNATE PROPOSED IS EQUIVALENT IN STRENGTH TO THE CHANNEL/PIPE SECTIONS SHOWN AND IF APPROVED BY COMPANY REPRESENTATIVES AND LANDOWNER IN ADVANCE. SITE SPECIFIC ALTERNATE SUPPORT SYSTEM TO BE DEVELOPED BY COMPANY REPRESENTATIVES AND FURNISHED TO CONTRACTOR FOR SPANS IN EXCESS OF 20', TILE GREATER THEN 10" DIAMETER, AND FOR "HEADER" SYSTEMS.
6. ALL MATERIAL TO BE FURNISHED BY CONTRACTOR.
7. PRIOR TO REPAIRING TILE, CONTRACTOR SHALL PROBE Laterally INTO THE EXISTING TILE TO FULL WIDTH OF THE RIGHTS OF WAY TO DETERMINE IF ADDITIONAL DAMAGE HAS OCCURRED. ALL DAMAGED/DISTURBED TILE SHALL BE REPAIRED AS NEAR AS PRACTICABLE TO ITS ORIGINAL OR BETTER CONDITION.

## PERMANENT DRAIN TILE REPAIR



## OFFICE OF THE SECRETARY OF STATE

ALEXI GIANNOULIAS-Secretary of State

14010599

MARCH 19, 2024

COGENCY GLOBAL INC.  
600 SOUTH SECOND ST, SUITE 404  
SPRINGFIELD, IL 62704-2542

RE MAHOMET IL SOLAR 1, LLC

DEAR SIR OR MADAM:

THE AMENDED APPLICATION FOR ADMISSION HAS BEEN PLACED ON FILE. THE LIMITED LIABILITY COMPANY HAS BEEN CREDITED WITH THE REQUIRED FILING FEE.

SINCERELY YOURS,

ALEXI GIANNOULIAS  
ILLINOIS SECRETARY OF STATE  
DEPARTMENT OF BUSINESS SERVICES  
LIMITED LIABILITY DIVISION  
217-524-8008

Form **LLC-45.25**  
May 2012  
Secretary of State  
Department of Business Services  
Limited Liability Division  
501 S. Second St., Rm. 351  
Springfield, IL 62756  
217-524-8008  
www.cyberdriveillinois.com

Payment may be made by check payable to Secretary of State. If check is returned for any reason this filing will be void.

Illinois  
Limited Liability Company Act  
Amended Application for Admission

**SUBMIT IN DUPLICATE**

Type or print clearly.

Filing Fee: \$50

Approved: 

FILE # 14010599  
This space for use by Secretary of State.

**FILED**

**MAR 19 2024**

**ALEXI GIANNOULIAS**  
SECRETARY OF STATE

1. Limited Liability Company name: Nurmi Farm Solar, LLC
2. If required by this office this amended application is accompanied by a Certificate of Good Standing, a Certificate of Fact, or a copy of the Articles of Amendment to the Articles of Organization, as evidence of any change, such document being duly authenticated by the proper officer of the state or country wherein the Limited Liability Company is organized, which certification is not more than 60 days old.
3. Application for Admission is amended as follows (check applicable item(s) below):
- ☐ a) Admission of a new manager (give name and address below)\*
  - ☐ b) Withdrawal of manager (give name below)
  - ☐ c) Change in address of the records office/principal place of business as required by Sec. 1-40 of the Act. (Give new physical number and street address, P.O. Box alone or C/O is unacceptable.)
  - ☐ d) Change of registered agent and/or registered agent's office (Give new name and/or address below; address change to P.O. Box alone or C/O is unacceptable.)
  - ☒ e) Change in the Limited Liability Company's name (give new name below) (evidence required)
  - ☐ f) Change in date of duration
  - ☐ g) Change in management structure (state change below)
  - ☐ h) Establish authority to issue series (fee \$300) (evidence required)
  - ☐ i) Other (give information in space below)

\* Only managers and any member with the authority of manager are required to be reported.

Additional information:

The name of the Limited Liability Company has been changed to Mahomet IL Solar 1, LLC.

4. I affirm, under penalties of perjury, having authority to sign hereto, that this Amended Application for Admission is to the best of my knowledge and belief, true, correct and complete.

Dated: March 13, 2024  
Month/Day Year



Signature

Brian Dunn, Member

Name and Title (type or print)

SRE Solar Origination 2, LLC

If applicant is signing for a company or other entity, state name of company or entity.

NOTE: A professional LLC registered with the Illinois Department of Financial and Professional regulations must contain the term Professional Limited Liability Company, PLLC or P.L.L.C. in its name. The specific professional service must also be stated in its purpose.

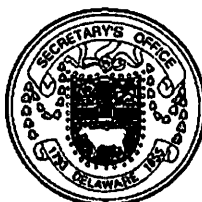


# Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF  
DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT  
COPY OF THE CERTIFICATE OF AMENDMENT OF "NURMI FARM SOLAR,  
LLC", CHANGING ITS NAME FROM "NURMI FARM SOLAR, LLC" TO  
"MAHOMET IL SOLAR 1, LLC", FILED IN THIS OFFICE ON THE  
THIRTEENTH DAY OF MARCH, A.D. 2024, AT 4:37 O`CLOCK P.M.



2668637 8100  
SR# 20241044606

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

A handwritten signature in black ink, appearing to read "JBullock", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed.

Jeffrey W. Bullock, Secretary of State

Authentication: 203045732  
Date: 03-18-24

**STATE OF DELAWARE  
CERTIFICATE OF AMENDMENT**

1. Name of Limited Liability Company: Nurmi Farm Solar, LLC

2. The Certificate of Formation of the limited liability company is hereby amended as follows:

The name of the Limited Liability Company is Mahomet IL Solar 1, LLC.

IN WITNESS WHEREOF, the undersigned have executed this Certificate on the 13th day of March, A.D. 2024.

By: Traci M. Radice  
Authorized Person(s)

Name: Traci M. Radice  
Print or Type

## *EXHIBIT F: State Historic Preservation Study (SHPO)*



Illinois  
Department of  
**Natural  
Resources**

JB Pritzker, Governor • Natalie Phelps Finnie, Director  
One Natural Resources Way • Springfield, Illinois 62702-1271

[www.dnr.illinois.gov](http://www.dnr.illinois.gov)

**Champaign County**

**IL-Mahomet**

**New Construction of a Community Solar Project, IL - Mahomet**

**South side of Oak St. East of Spring Lake Road, Section:17-Township:20S-Range:7E**

**SHPO Log #008031424**

**April 29, 2024**

**Garrett L. Knudsen**

**Area M Consulting**

**7302 Claredon Dr.**

**Edina, MN 55439**

**This letter is to inform you that we have reviewed the information provided concerning the referenced project.**

**Our review of the records indicates that no historic, architectural or archaeological sites exist within the project area.**

**Please retain this letter in your files as evidence of compliance with Section 4 of the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420/1 et. seq.). This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Remains Protection Act (20 ILCS 3440).**

**If you have any further questions, please contact Rita Baker, Cultural Resources Manager, at 217/785-4998 or at [Rita.E.Baker@illinois.gov](mailto:Rita.E.Baker@illinois.gov).**

**Sincerely,**

**Carey L. Mayer, AIA**

**Deputy State Historic Preservation Officer**

## *EXHIBIT G: Vegetation Management Plan*



# VEGETATIVE MAINTENANCE PLAN

## **Project Information**

Project Name: Mahomet Solar

Address: County Road 125 E, Mahomet, Illinois 61853

Project Area: Approximately 36-acre project area

## **Background**

The proposed Mahomet Solar solar project involves the construction of a 5.00 megawatt alternating current single axis tracker photovoltaic system and supporting infrastructure such as access roads, electrical lines, and perimeter fence.

Following construction of the solar facility, disturbed grounds will be re-established with pollinator-friendly low growth/low maintenance ground cover. The vegetative maintenance contractor will be responsible for inspecting and maintaining the vegetative integrity of the solar facility. The contractor will conduct on-site activities during growing months at the frequency of approximately 2-3 times per year. The contractor is expected to adjust site maintenance frequency based on time of year and weather conditions. To avoid rutting, erosion, and soil compaction, weather forecasts will be consulted, and on-site field inspections will be conducted prior to mowing or cutting to ensure that these practices occur when the site is able to withstand this type of activity.

Around portions of the perimeter of the project, a row of evergreen trees will be planted to provide a visual buffer for some of the adjacent landowners. The trees will be approximately 5-feet-tall at planting and are anticipated to be of the evergreen species *Thuja Occidentalis*, or approved equal.

The vegetative plantings will be in accordance with Illinois Department of Natural Resources (IDNR) guidelines, which are intended to maintain native and non-invasive naturalized perennial vegetation that protect the health and well-being of the pollinators.

It is important to note this scope of work covers work along the access road and within the fence line of the project. Remaining lands outside the fence will continue to be utilized for agricultural purposes and maintained by the landowner or their representative.

## **Site Activities**

### **• Perimeter Maintenance**

- o The 7-foot perimeter chain link fence line will be inspected for items of trash, that may have accumulated since the previous site visit. These items will be collected and disposed of offsite. Vegetative growth along the fence line will also be trimmed and maintained to prevent the growth of weeds or tall grasses.





- Mowing

- o Mowing is a three-step process. First, the mower or bush hog trims the large areas. Second, trimmers are used to cut around structural elements and other places the mower couldn't reach.

- o Finally, any vegetation that was thrown and stuck to the modules will be cleaned off. Additionally, spot-mowing is recommended for reducing invasive plants while native species are becoming established. Spot-mowing should be done at a raised height to avoid damaging native plants.

- Site Inspections

- o During each maintenance visit, the site will be inspected for signs of erosion. Any areas of concern will be immediately communicated to the project owner/developer to evaluate and implement corrective measures. Should the contractor observe a non-typical condition or change in site conditions the project owner/developer will be immediately notified.

- o The perimeter tree buffer/visual screen will be inspected to ensure the trees are healthy. Any trees that have died will be replaced in-kind in a timeframe that is mutually agreed upon by the AHJ and owner.

- Access Road Maintenance

- o During maintenance activities, the access road will be inspected and maintained to ensure that vegetative creep does not occur. This will include the mowing of at least a 3-foot strip paralleling each side of the road. Additionally, any observed vegetative creep within the road will be removed. Design corridors for emergency vehicle access will be maintained.

Table 1: Scope of Work

Activity	Frequency	Timing
Perimeter Maintenance	8-12 Weeks	May - October
Mowing	8-12 Weeks	May - October
Site Inspections	8-12 Weeks	May - October
Screening Maintenance*	4-8 Weeks	May - October
Access Road Maintenance	8-12 Weeks	May - October

Note: Dead or diseased trees removed and replaced on an annual basis, or as otherwise required in writing by the Building and Zoning supervisor or his/her designee.

## *EXHIBIT H: Interconnection Agreement*

**STANDARD AGREEMENT FOR INTERCONNECTION  
OF DISTRIBUTED GENERATION FACILITIES WITH A  
CAPACITY LESS THAN OR EQUAL TO 10 MVA**

This agreement (together with all attachments, the “Agreement”) is made and entered into this 05 day of February 2024, by and between Mahomet IL Solar 1, LLC (“interconnection customer”), as a LLC organized and existing under the laws of the State of Delaware and Ameren Illinois Company, (“Electric Distribution Company” or “EDC”), a corporation existing under the laws of the State of Illinois. Interconnection customer and EDC each may be referred to as a “Party”, or collectively as the “Parties”.

**Recitals:**

**Whereas**, interconnection customer is proposing to install or direct the installation of a distributed generation facility, or is proposing a generating capacity addition to an existing distributed generation facility, consistent with the interconnection request application form completed by interconnection customer on 4/25/23; and

**Whereas**, the interconnection customer will operate and maintain, or cause the operation and maintenance of, the DER facility; and

**Whereas**, interconnection customer desires to interconnect the DER facility with EDC's electric distribution system.

**Now, therefore**, in consideration of the premises and mutual covenants set forth in this Agreement, and other good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, the Parties covenant and agree as follows:

**Article 1. Scope and Limitations of Agreement**

- 1.1 This Agreement shall be used for all approved interconnection requests for DER facilities that fall under Levels 2, 3 and 4 according to the procedures set forth in Part 466 of the Commission's rules (83 Ill. Adm. Code 466) (referred to as the Illinois Distributed Energy Resources Interconnection Standard).
- 1.2 This Agreement governs the terms and conditions under which the DER facility will interconnect to, and operate in parallel with, the EDC's electric distribution system.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the interconnection customer's power.
- 1.4 Nothing in this Agreement is intended to affect any other agreement between the EDC and the interconnection customer.

- 1.5 Terms used in this agreement are defined as in Section 466.20 of the Illinois Distributed Generation Interconnection Standard unless otherwise noted.
- 1.6 Responsibilities of the Parties
  - 1.6.1 The Parties shall perform all obligations of this Agreement in accordance with all applicable laws and regulations.
  - 1.6.2 The EDC shall construct, own, operate, and maintain its interconnection facilities in accordance with this Agreement.
  - 1.6.3 The interconnection customer shall construct, own, operate, and maintain its distributed generation facility and interconnection facilities in accordance with this Agreement.
  - 1.6.4 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for, the facilities that it now or subsequently may own unless otherwise specified in the attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of its respective lines and appurtenances on its respective sides of the point of interconnection.
  - 1.6.5 The interconnection customer agrees to design, install, maintain and operate its DER facility so as to minimize the likelihood of causing an adverse system impact on the electric distribution system or any other electric system that is not owned or operated by the EDC.
- 1.7 Parallel Operation Obligations

Once the DER facility has been authorized to commence parallel operation, the interconnection customer shall abide by all operating procedures established in IEEE Standard 1547 and any other applicable laws, statutes or guidelines, including those specified in Attachment 4 of this Agreement.
- 1.8 Metering

The interconnection customer shall be responsible for the cost to purchase, install, operate, maintain, test, repair, and replace metering and data acquisition equipment specified in Attachments 5 and 6 of this Agreement.
- 1.9 Reactive Power
  - 1.9.1 Interconnection customers with a DER facility larger than or equal to 1 MVA shall design their DER facilities to maintain a power factor at the point of interconnection between .95 lagging and .95 leading at all times. Interconnection customers with a DER facility smaller than 1 MVA shall design their DER facility to maintain a power factor at the point of interconnection between .90 lagging and .90 leading at all times.

1.9.2 Any EDC requirements for meeting a specific voltage or specific reactive power schedule as a condition for interconnection shall be clearly specified in Attachment 4. Under no circumstance shall the EDC's additional requirements for voltage or reactive power schedules exceed the normal operating capabilities of the DER facility.

1.9.3 If the interconnection customer does not operate the distributed generation facility within the power factor range specified in Attachment 4, or does not operate the distributed generation facility in accordance with a voltage or reactive power schedule specified in Attachment 4, the interconnection customer is in default, and the terms of Article 6.5 apply.

#### 1.10 Standards of Operations

The interconnection customer must obtain all certifications, permits, licenses and approvals necessary to construct, operate and maintain the facility and to perform its obligations under this Agreement. The interconnection customer is responsible for coordinating and synchronizing the DER facility with the EDC's system. The interconnection customer is responsible for any damage that is caused by the interconnection customer's failure to coordinate or synchronize the DER facility with the electric distribution system. The interconnection customer agrees to be primarily liable for any damages resulting from the continued operation of the DER facility after the EDC ceases to energize the line section to which the DER facility is connected. In Attachment 4, the EDC shall specify the shortest reclose time setting for its protection equipment that could affect the DER facility. The EDC shall notify the interconnection customer at least 10 business days prior to adopting a faster reclose time on any automatic protective equipment, such as a circuit breaker or line recloser, that might affect the DER facility.

### **Article 2. Inspection, Testing, Authorization, and Right of Access**

#### 2.1 Equipment Testing and Inspection

The interconnection customer shall test and inspect its DER facility including the interconnection equipment prior to interconnection in accordance with IEEE Standard 1547 (2003) and IEEE Standard 1547.1 (2005). The interconnection customer shall not operate its DER facility in parallel with the EDC's electric distribution system without prior written authorization by the EDC as provided for in Articles 2.1.1-2.1.3.

- 2.1.1 The EDC shall perform a witness test after construction of the DER facility is completed, but before parallel operation, unless the EDC specifically waives the witness test. The interconnection customer shall provide the EDC at least 15 business days' notice of the planned commissioning test for the DER facility. If the EDC performs a witness test at a time that is not concurrent with the commissioning test, it shall contact the interconnection customer to schedule the witness test at a mutually agreeable time within 10 business days after the scheduled commissioning test designated on the application. If the EDC does not perform the witness test within 10 business days after the commissioning test, the witness test is deemed waived unless the Parties mutually agree to extend the date for scheduling the witness test, or unless the EDC cannot do so for good cause, in which case, the Parties shall agree to another date for scheduling the test within 10 business days after the original scheduled date. If the witness test is not acceptable to the EDC, the EDC shall deliver in writing a detailed technical description of all deficiencies of the DER facility identified by the EDC during the witness test. The interconnection customer has 30 business days after receipt of the written description to address and resolve any deficiencies. This time period may be extended upon agreement between the EDC and the interconnection customer. If the interconnection customer fails to address and resolve the deficiencies to the satisfaction of the EDC, the applicable cure provisions of Article 6.5 shall apply. The interconnection customer shall, if requested by the EDC, provide a copy of all documentation in its possession regarding testing conducted pursuant to IEEE Standard 1547.1.
- 2.1.2 If the interconnection customer conducts interim testing of the DER facility prior to the witness test, the interconnection customer shall obtain permission from the EDC before each occurrence of operating the DER facility in parallel with the electric distribution system. The EDC may, at its own expense, send qualified personnel to the DER facility to observe such interim testing, but it cannot mandate that these tests be considered in the final witness test. The EDC is not required to observe the interim testing or precluded from requiring the tests be repeated at the final witness test. During and leading up to the witness test, the EDC shall not limit the interconnection customer's ability to test the DER facility during normal working hours except for safety and reliability reasons.
- 2.1.3 After the DER facility passes the witness test, the EDC shall affix an authorized signature to the certificate of completion and return it to the interconnection customer approving the interconnection and authorizing parallel operation. The authorization shall not be conditioned or delayed and the EDC shall return the signed certificate of completion to the interconnection customer no more than 10 business days after the date that the DER facility passes the witness test.



- 2.2     Commercial Operation  
The interconnection customer shall not operate the DER facility, except for interim testing as provided in Article 2.1, until such time as the certificate of completion is signed by all Parties.
- 2.3     Right of Access  
The EDC must have access to the disconnect switch and metering equipment of the DER facility at all times. When practical, the EDC shall provide notice to the customer prior to using its right of access.

### **Article 3. Effective Date, Term, Termination, and Disconnection**

- 3.1     Effective Date  
This Agreement shall become effective upon execution by all Parties.
- 3.2     Term of Agreement  
This Agreement shall become effective on the effective date and shall remain in effect unless terminated in accordance with Article 3.3 of this Agreement.
- 3.3     Termination
- 3.3.1   The interconnection customer may terminate this Agreement at any time by giving the EDC 30 calendar days prior written notice.
- 3.3.2   Either Party may terminate this Agreement after default pursuant to Article 6.5.
- 3.3.3   The EDC may terminate, upon 60 calendar days' prior written notice, for failure of the interconnection customer to complete construction of the DER facility within 12 months after the in-service date as specified by the Parties in Attachment 2, which may be extended by agreement between the Parties.
- 3.3.4   The EDC may terminate this Agreement, upon 60 calendar days' prior written notice, if the interconnection customer has abandoned, cancelled, permanently disconnected or stopped development, construction, or operation of the DER facility, or if the interconnection customer fails to operate the DER facility in parallel with the EDC's electric system for three consecutive years.
- 3.3.5   Upon termination of this Agreement, the DER facility will be disconnected from the EDC's electric distribution system. Terminating this Agreement does not relieve either Party of its liabilities and obligations that are owed or continuing when the Agreement is terminated.
- 3.3.6   If the Agreement is terminated, the interconnection customer loses its position in the interconnection queue.
- 3.4     Temporary Disconnection

A Party may temporarily disconnect the DER facility from the electric distribution system in the event one or more of the following conditions or events occurs:

- 3.4.1 Emergency conditions – shall mean any condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that the EDC determines is likely to cause an adverse system impact, or is likely to have a material adverse effect on the EDC's electric distribution system, interconnection facilities or other facilities, or is likely to interrupt or materially interfere with the provision of electric utility service to other customers; or (3) that is likely to cause a material adverse effect on the DER facility or the interconnection equipment. Under emergency conditions, the EDC or the interconnection customer may suspend interconnection service and temporarily disconnect the DER facility from the electric distribution system. The EDC must notify the interconnection customer when it becomes aware of any conditions that might affect the interconnection customer's operation of the DER facility. The interconnection customer shall notify the EDC when it becomes aware of any condition that might affect the EDC's electric distribution system. To the extent information is known, the notification shall describe the condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.
- 3.4.2 Scheduled maintenance, construction, or repair – the EDC may interrupt interconnection service or curtail the output of the DER facility and temporarily disconnect the DER facility from the EDC's electric distribution system when necessary for scheduled maintenance, construction, or repairs on EDC's electric distribution system. The EDC shall provide the interconnection customer with notice no less than 5 business days before an interruption due to scheduled maintenance, construction, or repair, or the EDC shall provide notice immediately if the scheduled maintenance, construction, or repair is scheduled less than 5 business days in advance. The EDC shall coordinate the reduction or temporary disconnection with the interconnection customer; however, the interconnection customer is responsible for out-of-pocket costs incurred by the EDC for deferring or rescheduling maintenance, construction or repair at the interconnection customer's request.
- 3.4.3 Forced outages – The EDC may suspend interconnection service to repair the EDC's electric distribution system. The EDC shall provide the interconnection customer with prior notice, if possible. If prior notice is not possible, the EDC shall, upon written request, provide the interconnection customer with written documentation, after the fact, explaining the circumstances of the disconnection.
- 3.4.4 Adverse system impact – the EDC must provide the interconnection customer with written notice of its intention to disconnect the DER facility, if the EDC

determines that operation of the DER facility creates an adverse system impact. The documentation that supports the EDC's decision to disconnect must be provided to the interconnection customer. The EDC may disconnect the DER facility if, after receipt of the notice, the interconnection customer fails to remedy the adverse system impact, unless emergency conditions exist, in which case, the provisions of Article 3.4.1 apply. The EDC may continue to leave the generating facility disconnected until the adverse system impact is corrected.

- 3.4.5 Modification of the DER facility – The interconnection customer must receive written authorization from the EDC prior to making any change to the DER facility, other than a minor equipment modification. If the interconnection customer modifies its facility without the EDC's prior written authorization, the EDC has the right to disconnect the DER facility until such time as the EDC concludes the modification poses no threat to the safety or reliability of its electric distribution system.
- 3.4.6 The EDC's compliance with Article 3 shall preclude any claim for damages for any lost opportunity or other costs incurred by the interconnection customer as a result of an interruption of service under Article 3. Any dispute over whether the EDC complied with Article 3 shall be resolved in accordance with the dispute resolution mechanism set forth in Article 8.

#### **Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

##### **4.1 Interconnection Facilities**

- 4.1.1 The interconnection customer shall pay, or reimburse the EDC, as applicable, for the cost of the interconnection facilities itemized in Attachment 3. The EDC shall identify the additional interconnection facilities necessary to interconnect the DER facility with the EDC's electric distribution system, the cost of those facilities, and the time required to build and install those facilities, as well as an estimated date of completion of the building or installation of those facilities.
- 4.1.2 The interconnection customer is responsible for its expenses, including overheads, associated with owning, operating, maintaining, repairing, and replacing its interconnection equipment.

##### **4.2 Distribution Upgrades**

The EDC shall design, procure, construct, install, and own any distribution upgrades. The actual cost of the distribution upgrades, including overheads, shall be directly assigned to the interconnection customer whose distributed generation facility caused the need for the distribution upgrades.

## **Article 5. Billing, Payment, Milestones, and Financial Security**

- 5.1 Billing and Payment Procedures and Final Accounting (Applies to supplemental reviews conducted under Level 2 or 3 review with EDC construction necessary for accommodating the DER facility, and Level 4 reviews)
  - 5.1.1 The EDC shall bill the interconnection customer for the design, engineering, construction, and procurement costs of EDC-provided interconnection facilities and distribution upgrades contemplated by this Agreement as set forth in Attachment 3. The billing shall occur on a monthly basis, or as otherwise agreed to between the Parties. The interconnection customer shall pay each bill within 30 calendar days after receipt, or as otherwise agreed to between the Parties.
  - 5.1.2 Unless waived by the interconnection customer, within 90 calendar days after completing the construction and installation of the EDC's interconnection facilities and distribution upgrades described in Attachments 2 and 3 to this Agreement, the EDC shall provide the interconnection customer with a final accounting report of any difference between (1) the actual cost incurred to complete the construction and installation of the EDC's interconnection facilities and distribution upgrades; and (2) the interconnection customer's previous deposit and aggregate payments to the EDC for the interconnection facilities and distribution upgrades. If the interconnection customer's cost responsibility exceeds its previous deposit and aggregate payments, the EDC shall invoice the interconnection customer for the amount due and the interconnection customer shall pay the EDC within 30 calendar days. If the interconnection customer's previous deposit and aggregate payments exceed its cost responsibility under this Agreement, the EDC shall refund to the interconnection customer an amount equal to the difference within 30 calendar days after the final accounting report. Upon request from the interconnection customer, if the difference between the budget estimate and the actual cost exceeds 20%, the EDC will provide a written explanation for the difference.
  - 5.1.3 If a Party disputes any portion of its payment obligation pursuant to this Article 5, the Party shall pay in a timely manner all non-disputed portions of its invoice, and the disputed amount shall be resolved pursuant to the dispute resolution provisions contained in Article 8. A Party disputing a portion of an Article 5 payment shall not be considered to be in default of its obligations under this Article.
- 5.2 Interconnection Customer Deposit

Within 15 business days after signing and returning the interconnection agreement to the EDC, the interconnection customer shall provide the EDC with a deposit equal to 100% of the estimated, non-binding cost to procure, install, or construct any such facilities. However, when the estimated date of completion of the building or installation of facilities exceeds three months from the date of notification, pursuant to Article 4.1.1

of this Agreement, this deposit may be held in escrow by a mutually agreed-upon third-party, with any interest to inure to the benefit of the interconnection customer. To the extent that this interconnection agreement is terminated for any reason, the EDC shall return all deposits provided by the interconnection customer, less any actual costs incurred by the EDC.

## **Article 6. Assignment, Limitation on Damages, Indemnity, Force Majeure, and Default**

### **6.1 Assignment**

This Agreement may be assigned by either Party. If the interconnection customer attempts to assign this Agreement, the assignee must agree to the terms of this Agreement in writing and such writing must be provided to the EDC. Any attempted assignment that violates this Article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason of the assignment. An assignee is responsible for meeting the same obligations as the assignor.

6.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate (including mergers, consolidations or transfers, or a sale of a substantial portion of the Party's assets, between the Party and another entity), of the assigning Party that has an equal or greater credit rating and the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement.

6.1.2 The interconnection customer can assign this Agreement, without the consent of the EDC, for collateral security purposes to aid in providing financing for the DER facility.

### **6.2 Limitation on Damages**

Except for cases of gross negligence or willful misconduct, the liability of any Party to this Agreement shall be limited to direct actual damages and reasonable attorney's fees, and all other damages at law are waived. Under no circumstances, except for cases of gross negligence or willful misconduct, shall any Party or its directors, officers, employees and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary or consequential damages, including lost profits, lost revenues, replacement power, cost of capital or replacement equipment. This limitation on damages shall not affect any Party's rights to obtain equitable relief, including specific performance, as otherwise provided in this Agreement. The provisions of this Article 6.2 shall survive the termination or expiration of the Agreement.

### **6.3 Indemnity**

6.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in Article 6.2.

- 6.3.2 The interconnection customer shall indemnify and defend the EDC and the EDC's directors, officers, employees, and agents, from all damages and expenses resulting from a third party claim arising out of or based upon the interconnection customer's (a) negligence or willful misconduct or (b) breach of this Agreement.
- 6.3.3 The EDC shall indemnify and defend the interconnection customer and the interconnection customer's directors, officers, employees, and agents from all damages and expenses resulting from a third party claim arising out of or based upon the EDC's (a) negligence or willful misconduct or (b) breach of this Agreement.
- 6.3.4 Within 5 business days after receipt by an indemnified Party of any claim or notice that an action or administrative or legal proceeding or investigation as to which the indemnity provided for in this Article may apply has commenced, the indemnified Party shall notify the indemnifying Party of such fact. The failure to notify, or a delay in notification, shall not affect a Party's indemnification obligation unless that failure or delay is materially prejudicial to the indemnifying Party.
- 6.3.5 If an indemnified Party is entitled to indemnification under this Article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this Article, to assume the defense of such claim, that indemnified Party may, at the expense of the indemnifying Party, contest, settle or consent to the entry of any judgment with respect to, or pay in full, the claim.
- 6.3.6 If an indemnifying Party is obligated to indemnify and hold any indemnified Party harmless under this Article, the amount owing to the indemnified person shall be the amount of the indemnified Party's actual loss, net of any insurance or other recovery.

#### 6.4 Force Majeure

- 6.4.1 As used in this Article, a force majeure event shall mean any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A force majeure event does not include an act of gross negligence or intentional wrongdoing by the Party claiming force majeure.



6.4.2 If a force majeure event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the force majeure event ("Affected Party") shall notify the other Party of the existence of the force majeure event within one business day. The notification must specify the circumstances of the force majeure event, its expected duration, and the steps that the Affected Party is taking and will take to mitigate the effects of the event on its performance. If the initial notification is verbal, it must be followed up with a written notification within one business day. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the force majeure event until the event ends. The Affected Party may suspend or modify its obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the force majeure event cannot be otherwise mitigated.

## 6.5 Default

6.5.1 No default shall exist when the failure to discharge an obligation (other than the payment of money) results from a force majeure event as defined in this Agreement, or the result of an act or omission of the other Party.

6.5.2 A Party shall be in default ("Default") of this Agreement if it fails in any material respect to comply with, observe or perform, or defaults in the performance of, any covenant or obligation under this Agreement and fails to cure the failure within 60 calendar days after receiving written notice from the other Party. Upon a default of this Agreement, the non-defaulting Party shall give written notice of the default to the defaulting Party. Except as provided in Article 6.5.3, the defaulting Party has 60 calendar days after receipt of the default notice to cure the default; provided, however, if the default cannot be cured within 60 calendar days, the defaulting Party shall commence the cure within 20 calendar days after original notice and complete the cure within six months from receipt of the default notice; and, if cured within that time, the default specified in the notice shall cease to exist.

6.5.3 If a Party has assigned this Agreement in a manner that is not specifically authorized by Article 6.1, fails to provide reasonable access pursuant to Article 2.3, and is in default of its obligations pursuant to Article 7, or if a Party is in default of its payment obligations pursuant to Article 5 of this Agreement, the defaulting Party has 30 days from receipt of the default notice to cure the default.

6.5.4 If a default is not cured as provided for in this Article, or if a default is not capable of being cured within the period provided for in this Article, the non-defaulting Party shall have the right to terminate this Agreement by written notice, and be relieved of any further obligation under this Agreement and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due under this Agreement, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article shall survive termination of this Agreement.

## **Article 7. Insurance**

For DER facilities with a nameplate capacity of 1 MVA or above, the interconnection customer shall carry sufficient insurance coverage so that the maximum comprehensive/general liability coverage that is continuously maintained by the interconnection customer during the term shall be not less than \$2,000,000 for each occurrence, and an aggregate, if any, of at least \$4,000,000. The EDC, its officers, employees and agents shall be added as an additional insured on this policy. The interconnection customer agrees to provide the EDC with at least 30 calendar days advance written notice of cancellation, reduction in limits, or non-renewal of any insurance policy required by this Article.

## **Article 8. Dispute Resolution**

- 8.1 Parties shall attempt to resolve all disputes regarding interconnection as provided in this Article in a good faith manner.
- 8.2 If there is a dispute between the Parties about implementation or an interpretation of the Agreement, the aggrieved Party shall issue a written notice to the other Party to the Agreement that specifies the dispute and the Agreement articles that are disputed.
- 8.3 A meeting between the Parties shall be held within 10 days after receipt of the written notice. Persons with decision-making authority from each Party shall attend the meeting. If the dispute involves technical issues, persons with sufficient technical expertise and familiarity with the issue in dispute from each Party shall also attend the meeting. The meeting may be conducted by teleconference. The informal process between the parties shall extend 30 days after the receipt of written notice, after which the dispute is deemed resolved and the timeframes for decisions within the interconnection process resume, unless one of the parties seeks resolution through non-binding arbitration procedures described in Article 8.4 or files a formal complaint at the Commission prior to the end of the 30-day period.
- 8.4 If the parties are unable to resolve the dispute through the process outlined in Article 8.3, either party may submit the interconnection dispute to an Ombudsman for non-binding arbitration. The party electing non-binding arbitration shall notify the other party of the request in writing. The non-binding arbitration process is limited to 60 days, absent mutual agreement of the parties and the Ombudsman to a longer period.
- 8.5 Each party shall bear its own fees, costs and expenses and an equal share of the expenses of the non-binding arbitration.
- 8.6 Within 10 days after the conclusion of the procedures in Article 8.4, either party may initiate a formal complaint with the Commission and ask for an expedited resolution of the dispute. If the complaint seeks expedited resolution, any written recommendation of the Ombudsman shall be appended to the complaint. The formal complaint shall proceed as a contested hearing pursuant to the Commission's Rules of Practice.

- 8.7 A party may, after good faith negotiations have failed, decline to pursue non-binding arbitration and instead initiate a formal complaint with the Commission. The formal complaint shall proceed as a contested hearing pursuant to the Commission's Rules of Practice.
- 8.8 Pursuit of dispute resolution may not affect an interconnection request or an interconnection applicant's position in the EDC's interconnection queue.
- 8.9 If the Parties fail to resolve their dispute under the dispute resolution provisions of this Article, nothing in this Article shall affect any Party's rights to obtain equitable relief, including specific performance, as otherwise provided in this Agreement.

## **Article 9. Miscellaneous**

### **9.1 Governing Law, Regulatory Authority, and Rules**

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the State of Illinois, without regard to its conflicts of law principles. This Agreement is subject to all applicable laws and regulations. Each Party expressly reserves the right to seek change in, appeal, or otherwise contest any laws, orders or regulations of a governmental authority. The language in all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against the EDC or interconnection customer, regardless of the involvement of either Party in drafting this Agreement.

### **9.2 Amendment**

Modification of this Agreement shall be only by a written instrument duly executed by both Parties.

### **9.3 No Third-Party Beneficiaries**

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations in this Agreement assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

### **9.4 Waiver**

9.4.1 Except as otherwise provided in this Agreement, a Party's compliance with any obligation, covenant, agreement, or condition in this Agreement may be waived by the Party entitled to the benefits thereof only by a written instrument signed by the Party granting the waiver, but the waiver or failure to insist upon strict compliance with the obligation, covenant, agreement, or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure.

9.4.2. Failure of any Party to enforce or insist upon compliance with any of the terms or conditions of this Agreement, or to give notice or declare this Agreement or the

rights under this Agreement terminated, shall not constitute a waiver or relinquishment of any rights set out in this Agreement, but the same shall be and remain at all times in full force and effect, unless and only to the extent expressly set forth in a written document signed by that Party granting the waiver or relinquishing any such rights. Any waiver granted, or relinquishment of any right, by a Party shall not operate as a relinquishment of any other rights or a waiver of any other failure of the Party granted the waiver to comply with any obligation, covenant, agreement, or condition of this Agreement.

9.5 Entire Agreement

Except as provided in Article 9.1, this Agreement, including all attachments, constitutes the entire Agreement between the Parties with reference to the subject matter of this Agreement, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants that constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

9.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original, but all constitute one and the same instrument.

9.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties, or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

9.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other governmental authority, (1) that portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by the ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

9.9 Environmental Releases

Each Party shall notify the other Party of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the DER facility or the interconnection facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as

practicable, provided that Party makes a good faith effort to provide the notice no later than 24 hours after that Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 9.10 Subcontractors

Nothing in this Agreement shall prevent a Party from using the services of any subcontractor it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing services and each Party shall remain primarily liable to the other Party for the performance of the subcontractor.

9.10.1 A subcontract relationship does not relieve any Party of any of its obligations under this Agreement. The hiring Party remains responsible to the other Party for the acts or omissions of its subcontractor. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of the hiring Party.

9.10.2 The obligations under this Article cannot be limited in any way by any limitation of subcontractor's insurance.

### **Article 10. Notices**

#### 10.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

#### **If to Interconnection Customer:**

Interconnection Customer:   Mahomet IL Solar 1, LLC  

Attention:   IL Development Team (Care of Summit Ridge Energy)  

Address:   1000 Wilson Blvd #2400  

City:   Arlington  

State:   VA  

Zip:   22209  

Phone:   978-505-3320  

Fax:   n/a  

E-Mail:   srellinois@srenergy.com  

#### **If to EDC:**

EDC:   Ameren Illinois Company  

Attention:   Ameren Illinois Net Metering Coordinator  

Address:   10 Richard Mark Way – Mail Code 910

City: Collinsville State: IL Zip: 62234  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-Mail: RenewablesIllinois@ameren.com

**Alternative Forms of Notice**

Any notice or request required or permitted to be given by either Party to the other Party and not required by this Agreement to be in writing may be given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out above.

**10.2 Billing and Payment**

Billings and payments shall be sent to the addresses set out below:

**If to Interconnection Customer:**

Interconnection Customer: Mahomet IL Solar 1, LLC  
Attention: Summit Ridge Energy's Accounts Payable (Accounts payable@srenergy.com)  
Address: 1000 Wilson Blvd #2400  
City: Arlington State: VA Zip: 22209

**If to EDC:**

EDC: Ameren Illinois  
Attention: Ameren Net Metering Coordinator  
Address: 10 Richard Mark Way – Mail Code 910  
City: Collinsville State: IL Zip: 62234

**10.3 Designated Operating Representative**

The Parties may also designate operating representatives to conduct the communications that may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

**Interconnection Customer's Operating Representative:** \_\_\_\_\_  
Attention: Summit Ridge Energy O&M Team (Tim Chaput admin@srenergy.com)  
Address: 1000 Wilson Blvd #2400  
City: Arlington State: VA Zip: 22209

**EDC's Operating Representative:** Ameren Illinois

Attention: Ameren Illinois Net Metering Coordinator



Address: 10 Richard Mark Way – Mail Code 910

City: Collinsville

State: IL

Zip: 62234

10.4 Changes to the Notice Information

Either Party may change this notice information by giving five business days written notice before the effective date of the change.

**Article 11. Signatures**

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

**For the Interconnection Customer: -** BarrettLaChance  
Barrett LaChance (Apr 10, 2024 10:54 EDT)

Name: Barrett LaChance

Title: Authorized Representative

Date: 4/10/24

**For EDC:**

Name: Jason Klein



Title: Sr. Director, Distrib Ops, Eng & Plng

Date: 04/12/2024

## Attachment 1

### Definitions

**Adverse system impact** – A negative effect that compromises the safety or reliability of the electric distribution system or materially affects the quality of electric service provided by the electric distribution company (EDC) to other customers.

**Applicable laws and regulations** – All duly promulgated applicable federal, State and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any governmental authority, having jurisdiction over the Parties.

**Commissioning test** – Tests applied to a distributed generation facility by the applicant after construction is completed to verify that the facility does not create adverse system impacts. At a minimum, the scope of the commissioning tests performed shall include the commissioning test specified IEEE Standard 1547 Section 5.4 "Commissioning tests."

**Distributed generation facility** – The equipment used by an interconnection customer to generate or store electricity that operates in parallel with the electric distribution system. A distributed generation facility typically includes an electric generator, prime mover, and the interconnection equipment required to safely interconnect with the electric distribution system or a local electric power system.

**Distribution upgrades** – A required addition or modification to the EDC's electric distribution system at or beyond the point of interconnection to accommodate the interconnection of a distributed generation facility. Distribution upgrades do not include interconnection facilities.

**Electric distribution company or EDC** – Any electric utility entity subject to the jurisdiction of the Illinois Commerce Commission.

**Electric distribution system** – The facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries from interchanges with higher voltage transmission networks that transport bulk power over longer distances. The voltage levels at which electric distribution systems operate differ among areas but generally carry less than 100 kilovolts of electricity. Electric distribution system has the same meaning as the term Area EPS, as defined in 3.1.6.1 of IEEE Standard 1547.

**Facilities study** – An engineering study conducted by the EDC to determine the required modifications to the EDC's electric distribution system, including the cost and the time required to build and install the modifications, as necessary to accommodate an interconnection request.

**Force majeure event** – Any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A force majeure event does not include an act of gross negligence or intentional wrongdoing.

**Governmental authority** – Any federal, State, local or other governmental regulatory or administrative agency, court, commission, department, board, other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that this term does not include the interconnection customer, EDC or any affiliate of either.

**IEEE Standard 1547** – The Institute of Electrical and Electronics Engineers, Inc. (IEEE), 3 Park Avenue, New York NY 10016-5997, Standard 1547 (2003), "Standard for Interconnecting Distributed Resources with Electric Power Systems."

**IEEE Standard 1547.1** – The IEEE Standard 1547.1 (2005), "Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems."

**Interconnection agreement or Agreement** – The agreement between the interconnection customer and the EDC. The interconnection agreement governs the connection of the distributed generation facility to the EDC's electric distribution system and the ongoing operation of the distributed generation facility after it is connected to the EDC's electric distribution system.

**Interconnection customer** – The entity entering into this Agreement for the purpose of interconnecting a distributed generation facility to the EDC's electric distribution system.

**Interconnection equipment** – A group of components or an integrated system connecting an electric generator with a local electric power system or an electric distribution system that includes all interface equipment, including switchgear, protective devices, inverters or other interface devices. Interconnection equipment may be installed as part of an integrated equipment package that includes a generator or other electric source.

**Interconnection facilities** – Facilities and equipment required by the EDC to accommodate the interconnection of a distributed generation facility. Collectively, interconnection facilities include all facilities, and equipment between the distributed generation facility and the point of interconnection, including modification, additions, or upgrades that are necessary to physically and electrically interconnect the distributed generation facility to the electric distribution system. Interconnection facilities are sole use facilities and do not include distribution upgrades.

**Interconnection request** – An interconnection customer's request, on the required form, for the interconnection of a new distributed generation facility, or to increase the capacity or change the operating characteristics of an existing distributed generation facility that is interconnected with the EDC's electric distribution system.

**Interconnection study** – Any of the following studies, as determined to be appropriate by the EDC: the interconnection feasibility study, the interconnection system impact study, and the interconnection facilities study.

**Illinois standard distributed generation interconnection rules** – The most current version of the procedures for interconnecting distributed generation facilities adopted by the Illinois Commerce Commission. See 83 Ill. Adm. Code 466.

**Parallel operation or Parallel** – The state of operation that occurs when a distributed generation facility is connected electrically to the electric distribution system.

**Point of interconnection** – The point where the distributed generation facility is electrically connected to the electric distribution system. Point of interconnection has the same meaning as the term "point of common coupling" defined in 3.1.13 of IEEE Standard 1547.

**Witness test** – For lab-certified equipment, verification (either by an on-site observation or review of documents) by the EDC that the interconnection installation evaluation required by IEEE Standard 1547 Section 5.3 and the commissioning test required by IEEE Standard 1547 Section 5.4 have been adequately performed. For interconnection equipment that has not been lab-certified, the witness test shall also include verification by the EDC of the on-site design tests required by IEEE Standard 1547 Section 5.1 and verification by the EDC of production tests required by IEEE Standard 1547 Section 5.2. All tests verified by the EDC are to be performed in accordance with the test procedures specified by IEEE Standard 1547.1.

## **Attachment 2**

### **Construction Schedule, Proposed Equipment & Settings**

This attachment is to be completed by the interconnection customer and shall include the following:

1. The construction schedule for the distributed generation facility.
2. A one-line diagram indicating the distributed generation facility, interconnection equipment, interconnection facilities, metering equipment, and distribution upgrades.
3. Component specifications for equipment identified in the one-line diagram.
4. Component settings.
5. Proposed sequence of operations.
6. A three line diagram showing current potential circuits for protective relays.
7. Relay tripping and control schematic diagram.

### Attachment 3

#### Description, Costs and Time Required to Build and Install the EDC's Interconnection Facilities

This attachment is to be completed by the EDC and shall include the following:

1. Required interconnection facilities, including any required metering.

Per the prior studies - EDC shall build the substation facilities as required to support the interconnection of the interconnection customer proposed facility up to the point of disconnect. The interconnection would consist of approx 1.6 miles new underbuild with Intellirupter at POI, distribution substation upgrades with high side lightning arrestors and VTs, transmission substation upgrades with VTs and relay setting changes and installation of SCADA communications package. The interconnection customer would be responsible for construction to the point of disconnect. All costs shall be paid for and/or reimbursed by the interconnection customer pursuant to Article 5 of this agreement. The interconnection customer is required to construct all facilities which connect to EDC's facilities or otherwise interface with EDC's facilities, all as determined by EDC's final, detailed engineering, in accordance with EDC's published standards.

Additional required interconnection facilities and system upgrades may be identified while completing Detailed Engineering.

2. An estimate of itemized costs charged by the EDC for interconnection, including overheads, based on results from prior studies.

Solar Origination 3 LLC: 184 Franklin St, Mahomet, IL- **4999KW**

(PowerClerk DER-20015)

**Queue Position: 10**

**NOTE:** THE COST ESTIMATE PROVIDED FOR YOUR PROJECT IN THE NEXT SECTION IS CONTINGENT UPON CONSTRUCTION COMPLETION OF ALL SYSTEM UPGRADES REQUIRED OF PROJECT(S) AHEAD OF YOUR PROJECT IN THE QUEUE THAT HAVE AN IMPACT ON THE CONNECTION OF YOUR PROJECT. SHOULD ANY ONE OR MORE OF SUCH PROJECTS WITHDRAW FOR ANY REASON, THE COSTS ASSOCIATED WITH YOUR PROJECT MAY CHANGE TO REFLECT THE COST IMPACT OF SYSTEM UPGRADES THAT NOW MAY BE REQUIRED TO CONNECT YOUR PROJECT AS A RESULT OF THE WITHDRAWAL OF SUCH HIGHER QUEUED PROJECTS.



An estimate of itemized costs charged by the EDC for interconnection, including overheads.



for approx 1.6 miles new underbuild with Intellirupter at POI, distribution substation upgrades with high side lightning arrestors and VTs, transmission substation upgrades with VTs and relay setting changes and installation of SCADA communications package. This will be subject to a true-up process at the end of the project.

***Ameren Illinois reserves the right to revise this estimate prior to and during construction based on the requirements of Good Utility practices not foreseen at the time of the original estimate. The revisions to the estimate may include, but are not limited to, changes in the cost of materials and required labor.***

***Notwithstanding Section 5.2 of this Agreement, the Parties may agree to other forms of security in lieu of a cash deposit provided such other form of security is acceptable to the EDC.***

3. An estimate for the time required to build and install the EDC's interconnection facilities based on results from prior studies and an estimate of the date upon which the facilities will be completed.

The final construction timeline will be developed during the scoping meeting which will be held with the applicant after the deposit is paid in full and will continue to be updated as the developer and Ameren Illinois work thru the construction process. That notwithstanding, it is anticipated that Ameren Illinois will initiate procurement activities immediately following the scoping meeting. Any revisions to the current scope of construction activities and their timeline will be provided immediately after that discussion. The requested in-service date is dependent on the availability of any long lead time equipment and weather impacts on construction activities.

## **Attachment 4**

### **Operating Requirements for Distributed Generation Facilities Operating in Parallel**

The EDC shall list specific operating practices that apply to this distributed generation interconnection and the conditions under which each listed specific operating practice applies.

## **Attachment 5**

### **Monitoring and Control Requirements**

This attachment is to be completed by the EDC and shall include the following:

1. The EDC's monitoring and control requirements must be specified, along with a reference to the EDC's written requirements documents from which these requirements are derived.
2. An internet link to the requirements documents.

<https://www.ameren.com/service-manual>

<http://standards.ieee.org>

## **Attachment 6**

### **Metering Requirements**

This attachment is to be completed by the EDC and shall include the following:

1. The metering requirements for the distributed generation facility.  
  
The specific metering requirements and equipment will be specified as part of the Detailed Engineering.
2. Identification of the appropriate tariffs that establish these requirements.
3. An internet link to these tariffs.

<https://www.ameren.com/illinois/business/rates/>

<https://www.ameren.com/illinois/electric-choice/renewables>

## **Attachment 7**

### **As Built Documents**

This attachment is to be completed by the interconnection customer and shall include the following:

When it returns the certificate of completion to the EDC, the interconnection customer shall provide the EDC with documents detailing the as-built status of the following:

1. A one-line diagram indicating the distributed generation facility, interconnection equipment, interconnection facilities, and metering equipment.
2. Component specifications for equipment identified in the one-line diagram.
3. Component settings.
4. Proposed sequence of operations.
5. A three-line diagram showing current potential circuits for protective relays.
6. Relay tripping and control schematic diagram.

## *EXHIBIT I: Property Value Report*



[www.cohnreznick.com](http://www.cohnreznick.com)

# REAL ESTATE ADJACENT PROPERTY VALUE IMPACT REPORT:

**Academic and Peer Authored Property Value Impact Studies,  
Research and Analysis of Existing Solar Facilities, and  
Market Participant and Assessor Interviews**

## **Prepared For:**

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## **Submitted By:**

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Andrew R. Lines, MAI, CRE  
Erin C. Bowen, MAI

**November 7, 2024**

## LETTER OF TRANSMITTAL

November 7, 2024

Moira Cronin  
Senior Manager, Project Development  
Summit Ridge Energy  
1000 Wilson Blvd #2400  
Arlington, VA, 22209

SUBJECT: Property Value Impact Report  
An Analysis of Existing Solar Farms

To Whom it May Concern:

CohnReznick is pleased to submit the accompanying property values impact report for proposed solar energy uses in Illinois. Per the client's request, CohnReznick researched property transactions adjacent to existing solar farms, researched and analyzed articles and other published studies, and interviewed real estate professionals and Township/County Assessors active in the market where solar farms are located, to gain an understanding of actual market transactions in the presence of solar energy uses.

The purpose of this consulting assignment is to determine whether proximity to a renewable energy use (solar farm) has an impact adjacent property values. The intended use of our opinions and conclusions is to assist the client in addressing local concerns and to provide information that local bodies are required to consider in their evaluation of solar project use applications. We have not been asked to value any specific property, and we have not done so.

The client and intended user for the assignment is Summit Ridge Energy. Additional intended users of our findings include the client's legal and site development professionals. The report may be used only for the aforementioned purpose and may not be distributed without the written consent of CohnReznick LLP ("CohnReznick").

This consulting assignment is intended to conform to the Uniform Standards of Professional Appraisal Practice (USPAP), the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, as well as applicable state appraisal regulations.

Based on the analysis in the accompanying report, and subject to the definitions, assumptions, and limiting conditions expressed in the report, our findings are:

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## FINDINGS

- I. **Academic Studies (pages 20-24):** CohnReznick reviewed and analyzed published academic studies that specifically analyzed the impact of solar facilities on nearby property values. These studies include multiple regression analyses of hundreds and thousands of sales transactions, and opinion surveys, for both residential homes and farmland properties in rural communities, the majority of the data used in various studies indicates that there is no consistent and measurable impact to surrounding property values. We note that some of these studies do show a very small impact to certain homes, in certain locations, at certain distances, but these conclusions are not necessarily indicative of future projects in other locations.

**Peer Authored Studies:** CohnReznick also reviewed studies prepared by other real estate valuation experts that specifically analyzed the impact of solar facilities on nearby property values. These studies found little to no measurable or consistent difference in value between the Test Area Sales and the Control Area Sales attributed to the proximity to existing solar farms and noted that solar energy uses are generally considered a compatible use.

- II. **CohnReznick Studies (pages 25-72):** Further, CohnReznick has performed in 21 states, of both residential and agricultural properties, in which we have determined that the existing solar facilities have not caused any consistent and measurable negative impact on property values.

For this Project, we have included eight of these studies which are most similar to the subject in terms of general location and size, summarized as follows:

CohnReznick - Existing Solar Farms Studied					
Solar Farm #	Solar Farm	County	State	MW AC	Acreage
1	2662 Freeport Solar CSG	Stephenson County	IL	2.00	18
2	Pretzel CSG	Stephenson County	IL	2.00	15
3	IGS Stockton DG CSG	Jo Daviess County	IL	1.90	23
4	Grand Ridge Solar	LaSalle County	IL	20.00	158
5	Portage Solar	Porter County	IN	2.00	56
6	Spring Mill Solar	Lawrence County	IN	1.10	9
7	Valparaiso Solar, LLC	Porter County	IN	1.00	28
8	IMPA Frankton	Madison County	IN	1.00	13

It is noted that proximity to the solar farms has not deterred sales of nearby agricultural land and residential single-family homes, nor has it deterred the development of new single-family homes on adjacent land.

This report also includes one “Before and After” analysis, in which sales that occurred prior to the announcement and construction of the solar farm project were compared with sales that occurred after completion of the solar farm project, for both adjoining and non-adjoining properties. No measurable impact on property values was demonstrated.

- III. Market Participant Commentary (pages 73-76): Our conclusions also consider interviews with over 75 County and Township Assessors, who have at least one solar farm in their jurisdiction, and in which they have determined that solar farms have not negatively affected adjacent property values.

With regards to the Project, we specifically interviewed in Illinois:

- In Otter Creek Township, in LaSalle County, Illinois, we spoke with Viki Crouch, the Township Assessor, who she said that there has been no impact on property values due to their proximity to the **Grand Ridge Solar Farm**.
- We spoke with Ken Crowley, Rockford Township Assessor in Winnebago County, Illinois, who stated that he has seen no impact on property values in his township as an effect of proximity to the **Rockford Solar Farm**.
- We spoke with James Weisiger, the Champaign Township Assessor in Champaign County, where the **University of Illinois Solar Farm** is located, and he noted there appears to have been no impact on property values as a result of proximity to the solar farm.
- Cindi Lotz of Fayette County, Illinois did indicate that the **Dressor Plains Solar** project has not had any impact whatsoever on adjacent property values.
- Angie Dieterman, the Chief County Assessment Officer in Stephenson County where nine solar farms have been constructed since 2020, stated that there has been no impact on property values due to their proximity to any of the solar farms.
- Cami Grossenbacher, Stephenson County Deputy Assessor, stated that there has been no impact on property values due to their proximity to the **2662 Freeport Solar CSG** project.

To give us additional insight as to how the market evaluates farmland and single-family homes with views of solar farms, we interviewed numerous real estate brokers and other market participants who were party to actual sales of property adjacent to solar; these professionals also confirmed that solar farms did not diminish property values or marketability in the areas they conducted their business.

- IV. Solar Farm Factors on Harmony of Use (pages 77-85): In the course of our research and studies, we have recorded information regarding the compatibility of these existing solar facilities and their adjoining uses, including the continuing development of land adjoining these facilities.

## CONCLUSION

Considering all of the preceding, the data indicates that solar facilities do not have a negative impact on adjacent property values.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Very truly yours,

**CohnReznick LLP**



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## SCOPE OF WORK

### CLIENT AND INTENDED USERS

The client and intended user of this report is Summit Ridge Energy, and other intended users may include the client's legal and site development professionals.

### INTENDED USE

The intended use of our opinions and conclusions is to assist the client in addressing local concerns and to provide information that local bodies are required to consider in their evaluation of solar project use applications. We have not been asked to value any specific property, and we have not done so. The report may be used only for the aforementioned purpose and may not be distributed without the written consent of CohnReznick LLP ("CohnReznick").

### PURPOSE

The purpose of this consulting assignment will be to address local concerns regarding solar farm use having a perceived impact on surrounding property values and provide consulting reports that can be submitted to municipal and county planning departments.

### DEFINITION OF VALUE

This report utilizes Market Value as the appropriate premise of value. Market value is defined as:

"The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;
2. Both parties are well informed or well advised, and acting in what they consider their own best interests;
3. A reasonable time is allowed for exposure in the open market.
4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."<sup>1</sup>

---

<sup>1</sup> Code of Federal Regulations, Title 12, Chapter I, Part 34.42[h]

## EFFECTIVE DATE & DATE OF REPORT

November 7, 2024 (Paired sale analyses contained within each study are periodically updated.)

## PRIOR SERVICES

USPAP requires appraisers to disclose to the client any services they have provided in connection with the subject property in the prior three years, including valuation, consulting, property management, brokerage, or any other services.

This report is a compilation of the existing solar farms which we have studied over the past three years and is not evaluating a specific subject site. In this instance, there is no “subject property” to disclose.

## INSPECTION

Andrew R. Lines, MAI, CRE and Erin C. Bowen, MAI have viewed the exterior of all comparable data referenced in this report in person, via photographs, or aerial imagery.

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## OVERVIEW OF SOLAR DEVELOPMENT IN THE UNITED STATES

Solar development increased almost exponentially over the past ten years in the United States as technology and the economic incentives (Solar Investment Tax Credits or ITC) made the installation of solar farms economically reasonable. The cost to install solar panels has dropped nationally by 70 percent since 2010, which has been one cause that led to the increase in installations. A majority of these solar farm installations are attributed to larger-scale solar farm developments for utility purposes. The chart below portrays the historical increase on an annual basis of solar installations in the US as a whole, courtesy of research by Solar Energy Industries Association (SEIA) and Wood Mackenzie, and projects solar photovoltaic (PV) deployment for the next five years through 2029, with the largest percentage of installations attributed to utility-scale projects.

US PV installation historical data and forecast by segment, 2014 - 2029



Source: SEIA/Wood Mackenzie Solar Market Insight Report Q2 2024

The U.S. installed 9.4 gigawatts (GWdc) of solar PV capacity in Q2 2024 to reach 209.8 GWdc of total installed capacity, enough to power 35.8 million American homes. Solar has accounted for 67% of all new electricity-generating capacity added in the U.S. in the first half of 2024. Residential solar is off to its slowest start since 2021, with 1,132 MWdc installed in Q2 2024, a 37% increase from Q2 2023. Utility-scale solar installations reached 5 GWdc, a 59% increase from Q2 2023 and 23% decrease from previous quarter. Supply chain constraints are still present, but many delayed projects came online in Q2 as module shipments make their way to project sites.

On April 22, 2024, the U.S. Environmental Protection Agency (“EPA”) announced \$7 billion in grant awards through a grant competition, Solar for All, to deliver residential solar projects to over 900,000 households

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nationwide. The grant competition is funded through the Inflation Reduction Act and will provide funds to states, territories, Tribal governments, municipalities, and non-profits across the country to develop long-lasting solar programs. The program is expected to generate over \$350 million in annual savings on electric bills for households.

In response to the Inflation Reduction Act (IRA), there has been a considerable increase in newly announced module manufacturing facilities in the US. As of the end of Q1 2023, Wood Mackenzie is tracking 52 GW of new facilities scheduled to come online by 2026, at least 16 GW of which are under construction.

Over the course of our five-year outlook, the US solar industry is expected to nearly triple in size. Between 2025 and 2029, the industry will add at least 40 GWdc annually increasing capacity by at least 250 GWdc by 2029. Solar will be the leading technology of the clean energy transition, thanks to the long-term policy certainty provided by the IRA.

Wood Mackenzie expects the industry to remain supply-constrained through at least the second half of this year. Equipment importers are still contending with detainments as they seek to provide the documentation needed for compliance with the Uyghur Forced Labor Prevention Act (UFLPA).

Once supply chain relief arrives, the true impacts of the Inflation Reduction Act will manifest in rapid development. Through the first half of 2024 the U.S. solar market installed 21.5 GWdc and is expected to reach 38.9 GWdc by the end of the year.

On December 2nd, 2022, the Department of Commerce issued a preliminary affirmative ruling in the anticircumvention case initiated earlier this year. While the ruling was not issued in time to allow for incorporation into our forecasts, new tariffs present a downside risk to our outlook.

As of August 12, 2022, the Inflation Reduction Act was passed in the Senate and The House of Representatives, which includes long-term solar incentives and investment in domestic solar manufacturing. Included in the bill, a 10-year extension and expansion of the Investment Tax Credit (ITC) and Production Tax Credit (PTC) will provide tax credits for solar manufacturing and direct payment options for tax credits. While the uncertainty of the anti-circumvention investigation remains present, the passage of the Inflation Reduction Act gives the solar industry long-term market certainty.

Recent articles show that over the past decade, the solar industry has experienced unprecedented growth. Among the factors contributing to its growth were government incentives, significant capacity additions from existing and new entrants and continual innovation. Solar farms offer a wide array of economic and environmental benefits to surrounding properties. Unlike other energy sources, solar energy does not produce emissions that may cause negative health effects or environmental damage. Solar farms produce a lower electromagnetic field exposure than most household appliances, such as TV and refrigerators, and studies have confirmed there are no health issues related to solar farms.<sup>2</sup> One of the bigger factors contributing to growth is the retirements of the existing fossil fleet driven by age and economics, and the more recent increase in demand for electricity driven by data centers, AI, and EVs and economic growth.

---

<sup>2</sup> "Electromagnetic Field and Public Health." Media Centre (2013): 1-4. World Health Organization.

Solar farm construction in rural areas has also dramatically increased the tax value of the land on which they are built, which has provided a financial boost to some counties. CohnReznick has studied real estate tax increases due to the installation of solar, which can range up to 10-12 times the rate for farmland. A majority of tax revenue is funneled back into the local area, and as much as 50 percent of increased tax revenue can typically be allocated to the local school district. By converting farmland to a passive solar use for the duration of the system's life, the solar energy use does not burden school systems, utilities, traffic, nor infrastructure as it is a passive use that does not increase population as say a residential subdivision would.

Beyond creating jobs, solar farms are also benefiting the overall long-term agricultural health of the community. The unused land, and also all the land beneath the solar panels, will be left to rejuvenate naturally. In the long run this is a better use of land since the soil is allowed to recuperate instead of being ploughed and fertilized year after year. A solar farm can offer some financial security for the property owner over 20 to 25 years. Once solar panel racking systems are removed, the land can revert to its original use.<sup>3</sup>

## NATIONAL COMMUNITY-SCALE ENERGY PRODUCTION

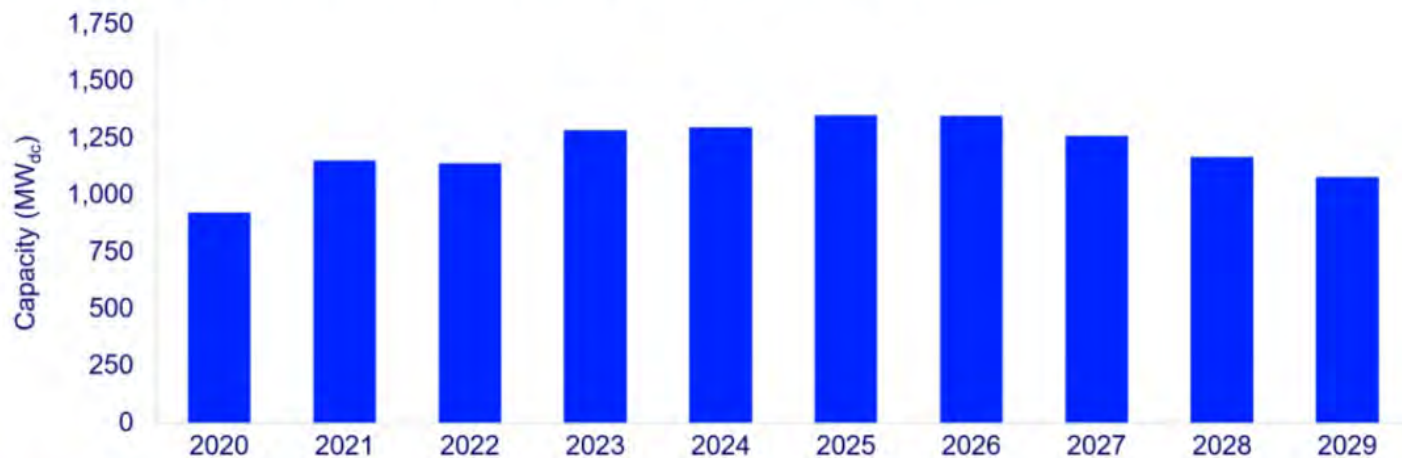
Community solar projects (facilities that generate 5 MW AC or less of power) account for 8.0 GW of installed power in the U.S. through August 2024, according to U.S. Energy Information Administration (EIA) data. The community solar industry installed 270 MW in Q2 2024, down 12 percent from Q2 2023 and a 12 percent decline from the previous quarter due to slow moving policies to expand into new states, according to SEIA data. According to the EIA through August 2024, there are over 4,170 community solar facilities in operation across the country.

Community solar installations declined 2 percent through the first half of the year compared to the first two quarters of 2023. However, community solar installations are projected to grow one percent year-over-year by the end of 2024 with total annual capacity forecasted to reach 1.3 GW. Community solar installations are projected to continue increasing at a rate of 2 percent annually through 2026 as funding from Solar for All and the availability of the ITC support lasting growth. However, community solar installations are projected to contract by 7 percent annually after 2026 and through 2029 as states with proposed program legislation are not included in SEIA's five-year outlook. The growth of community solar installations from 2020 through 2029 is presented in the following chart.

---

<sup>3</sup> NC State Extension. (May 2016). Landowner Solar Leasing: Contract Terms Explained. Retrieved from: <https://content.ces.ncsu.edu/landowner-solar-leasing-contract-terms-explained>

### Community solar installations and forecast, 2020-2029



Source: SEIA/Wood Mackenzie Solar Market Insight Report Q3 2024

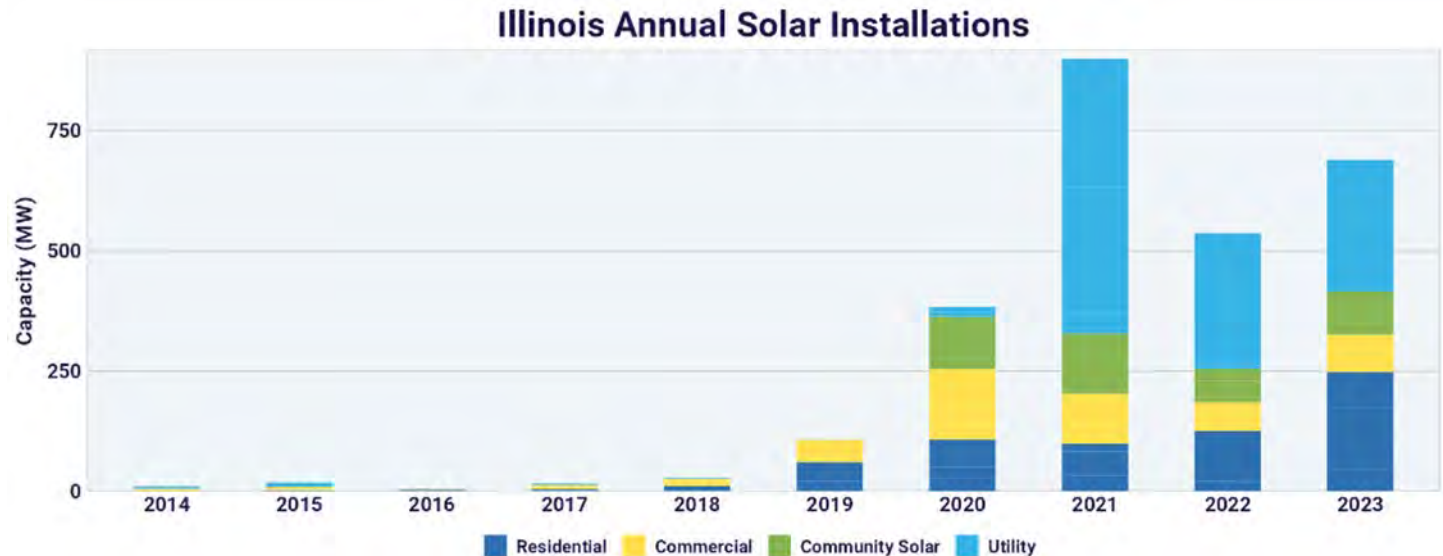
While early growth for community solar installations was led primarily by three key markets - New York, Minnesota, and Massachusetts - a growing list of states with community solar programs have helped diversify the market, creating large pipelines set to come to fruition over the next several years.

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## ENERGY PRODUCTION IN ILLINOIS

As of the end of Q2 2024, Illinois has 3,187 MW of solar installed, ranking 15<sup>th</sup> in the US for the capacity of solar installed according to the Solar Energy Industries Association (SEIA). There have been significantly more utility investments in clean energy with continued growth on the horizon, with 8,411 MW of solar proposed to be installed over the next five years.



Illinois has 1,433.8 MW AC of solar power planned for installation through December 2025 in 58 facilities across the state. Eighteen of the planned solar installations in Illinois are utility scale and total 1,349.3 MW AC, or approximately 94 percent of all planned installations. The largest new solar facility in Illinois will be a 1,200 MW AC utility scale installation projected to become operational in December 2027 in Lee County, which is being developed by Steward Creek Solar. The total planned solar facilities will increase solar power generation in the state by approximately 118 percent.

There are 40 community solar projects planned for the state of Illinois before the end of 2025, generating a total of 84.5 MW AC of power.

Illinois has fourteen utility scale solar facilities in operation, one of which, the Grand Ridge Solar Farm that we have studied and included in our report. The remaining utility scale solar facilities include:

- The 200 MW Prairie Wolf Solar Project, completed in November 2021;
- The 165.3 MW River Ferry Solar Project, completed in December 2023;
- The 149 MW Big River Solar Project, completed in August 2022;
- The 100 MW High Point Solar Project, completed in November 2021;
- The 99 MW Prairie State Solar Project, completed in July 2021;
- The 99 MW Dressor Plains Solar Project, completed in September 2021;
- The 70 MW Mulligan Solar Project, completed in July 2022;
- The 35 MW Earp Solar Project, completed in April 2024;
- The 30 MW Prairie Creek Solar Project, completed in November 2023;

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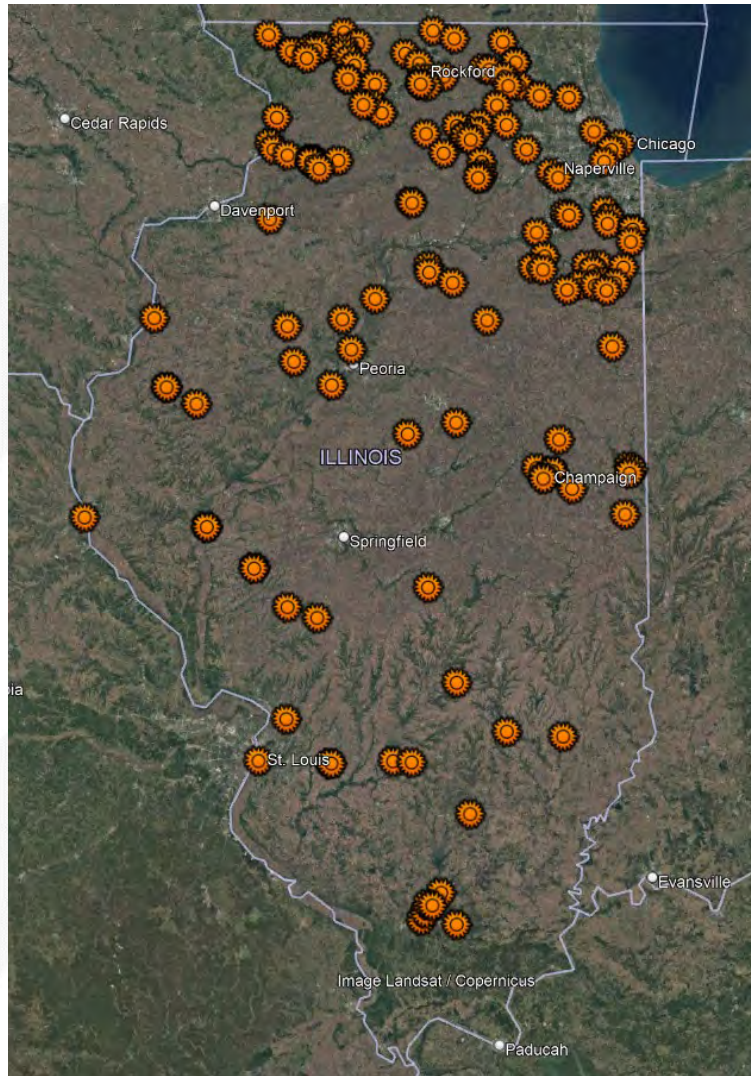
- The 20 MW DePue Holdings Solar Project, completed in February 2023;
- The 10 MW Northern Cardinal Solar Project, completed in February 2021,
- The 9.9 MW Belleville Solar Project, completed in September 2021;
- And the 9.0 MW Exelon Solar Chicago Project, completed in December 2009.

We spoke to the Supervisor of Assessments for each project to ask whether there have been any transactions or impacts on property values since the completion of the facility. Most Assessment Officers indicated that the project was so new that there was no data in which to study. Cindi Lotz of Fayette County, Illinois did indicate that the Dressor Plains Solar project “has not had any impact whatsoever” on adjacent property values. We have reviewed the areas surrounding each of these newly constructed facilities; as of the reporting date, there are not yet eligible transaction for us to develop an impact study on these projects for inclusion in our analysis.

Illinois has seen considerable growth in solar production since the first project became operational in 2009. Of the 165 existing solar projects in Illinois, 12 were completed between 2009 and 2019. A further 46 solar projects were completed in 2020 alone, followed by 68 in 2021, 13 in 2022, 14 in 2023, and 12 through August 2024. The solar projects completed in the last five years account for 93% of the total solar projects in the state. Nevertheless, we were able to study four existing solar projects in Illinois, that had transactions after the completion of the solar project, Grand Ridge Solar, Freeport Solar, IGS Stockton DG Community Solar Garden and Pretzel Community Solar Garden, included in this report.

Illinois is home to 5,975 solar related jobs, and 373 solar related companies, which includes 76 manufacturers, and 114 installers/developers. We have presented a map on the following page of existing community-scale solar projects, less than 5.0 MW, in Illinois.





*Existing community-scale solar projects, less than 5.0 MW*

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## APPRAISAL THEORY – ADJACENT PROPERTY’S IMPACT ON VALUE

According to Randall Bell, PhD, MAI, author of text *Real Estate Damages*, published by the Appraisal Institute in 2016, understanding the market’s perceptions on all factors that may have an influence on a property’s desirability (and therefore its value) is essential in determining if a diminution or enhancement of value has occurred.<sup>4</sup> According to Dr. Bell:

*“There is often a predisposition to believe that detrimental conditions automatically have a negative impact on property values. However, it is important to keep in mind that if a property’s value is to be affected by a negative condition, whether internal or external to the property, that condition must be given enough weight in the decision-making process of buyers and sellers to have a material effect on pricing relative to all the other positive and negative attributes that influence the value of that particular property.”<sup>5</sup>*

Market data and empirical research through the application of the three traditional approaches to value should be utilized to estimate the market value to determine if there is a material effect on pricing due to the influence of a particular characteristic on a property.

A credible impact analysis is one that is logical, innate, testable and repeatable, prepared in conformity with approved valuation techniques. In order to produce credible assignment results, more than one valuation technique should be utilized for support for the primary method, or a check of reasonableness, such as utilization of more than one approach to value, conducting a literature review, or having discussions (testimony) with market participants.<sup>6</sup> CohnReznick implemented the scientific method<sup>7</sup> to determine if a detrimental condition of proximity to a solar farm exists, further described in the next section.

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<sup>4</sup> Bell, Randall, PhD, MAI. *Real Estate Damages*. Third ed. Chicago, IL: Appraisal Institute, 2016. (Pages 1-2)

<sup>5</sup> Ibid, Page 314

<sup>6</sup> Ibid, Pages 7-8

<sup>7</sup> The scientific method is a process that involves observation, development of a theory, establishment of a hypothesis, and testing. The valuation process applies principles of the scientific method as a model, based upon economic principles (primarily substitution) as the hypothesis. The steps for the scientific method are outlined as follows:

1. Identify the problem.
2. Collect relevant data.
3. Propose a hypothesis.
4. Test the hypothesis.
5. Assess the validity of the hypothesis.

Bell, Randall, PhD, MAI. *Real Estate Damages*. Third ed. Chicago, IL: Appraisal Institute, 2016. (Pages 314-316)

## METHODOLOGY

The purpose of this report is to determine whether proximity to the solar facility resulted in any measurable and consistent impact on adjacent property values. To test this hypothesis, CohnReznick identified three relevant techniques to test if a detrimental condition exists.

- (1) A review of published studies;
- (2) Paired sale analysis of properties adjacent to existing solar generating facilities, which may include repeat sale analyses or “Before and After” analyses; and,
- (3) Interviews with real estate professionals and local real estate assessors.

The paired sales analysis is an effective method of determining if there is a detrimental impact on surrounding properties.

*“One of the most useful applications of the sales comparison approach is paired sale analysis. This type of analysis may compare the subject property or similarly impacted properties called **Test Areas** (at Points B, C, D, E, or F) with unimpaired properties called **Control Areas** (Point A). A comparison may also be made between the unimpaired value of the subject property before and after the discovery of a detrimental condition. If a legitimate detrimental condition exists, there will likely be a measurable and consistent difference between the two sets of market data; if not, there will likely be no significant difference between the two sets of data. This process involves the study of a group of sales with a detrimental condition, which are then compared to a group of otherwise similar sales without the detrimental condition.”<sup>8</sup>*

As an approved method, paired sales analysis can be utilized to extract the effect of a single characteristic on value. By definition, paired data analysis is “a quantitative technique used to identify and measure adjustments to the sale prices or rents of comparable properties; to apply this technique, sales or rental data on nearly identical properties is analyzed to isolate a single characteristic’s effect on value or rent.”<sup>9</sup> The text further describes that this method is theoretically sound when an abundance of market data, or sale transactions, is available for analysis.

Where data is available, CohnReznick has also prepared “Before and After” analyses or a Repeat Sale Analysis,<sup>10</sup> to determine if a detrimental impact has occurred.

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<sup>8</sup> Bell, Randall, PhD, MAI. *Real Estate Damages. Third ed.* Chicago, IL: Appraisal Institute, 2016. (Page 33)

<sup>9</sup> *The Appraisal of Real Estate 14<sup>th</sup> Edition.* Chicago, IL: Appraisal Institute, 2013.

<sup>10</sup> Another type of paired sales analysis involves studying the sale and subsequent resale of the same property. This method is used to determine the influence of time on market values or to determine the impact of a detrimental condition by comparing values before and after the discovery of the condition.

Bell, Randall, PhD, MAI. *Real Estate Damages. Third ed.* Chicago, IL: Appraisal Institute, 2016. (Page 35)



## SCOPE OF WORK

The scope of work utilized to test the hypothesis stated on the prior page is as follows:

1. Review published studies, assess credibility, and validity of conclusions;
2. Prepare paired sale analyses for existing solar farms as follows:
  - 2.1. Identify existing solar farms comparable to the proposed project to analyze;
  - 2.2. Define Test Area Sales and Control Areas Sales;
  - 2.3. Collect market data (sale transactions) for both Test Area and Control Area Sales;
  - 2.4. Analyze and confirm sales, including omission of sales that are not reflective of market value;
  - 2.5. Prepare comparative analysis of Test Area and Control Area sales, adjusting for market conditions;
  - 2.6. Interpret calculations; and
3. Conduct interviews with real estate professionals and local real estate assessors who have evaluated real property adjacent to existing solar farms.

It should be noted that our impact report data and methodology have been previously reviewed by our peer in the field – Kirkland Appraisals, LLC – as well as by the Solar Energy Industries Association (SEIA).

The following bullet points summarize important elements to consider in our scope of work:

- Test Area Sales consists of sales that are adjacent to an existing solar facility. Ownership and sales history for each adjoining property to an existing solar farm through the effective date of this report is maintained within our workfile. Adjoining properties with no sales data or that sold prior to the announcement of the solar farm were excluded from further analysis.
- Control Area Sales are generally located in the same market area, although varies based on the general location of the existing solar farm under analysis. In rural areas, sales are identified first within the township, and expands radially outward through the county until a reliable set of data points is obtained.
- Control Area Sales are generally between 12 and 18 months before or after the date of the Test Area Sale(s), and are comparable in physical characteristics such as age, condition, style, and size.
- Sales of properties that sold in a non-arm's length transaction (such as a transaction between related parties, bank-owned transaction, or between adjacent owners) were excluded from analysis as these are not considered to be reflective of market value, as defined earlier in this report. The sales that remained after exclusions were considered for a paired sale analysis.
- The methodology employed in this report for paired sale analysis does not rely on multiple subjective adjustments that are typical in many appraisals and single-paired sales analyses. Rather, the methodology remains objective, and the only adjustment required is for market conditions:<sup>11</sup> the analysis

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<sup>11</sup> Adjusting for market conditions is necessary as described in The Appraisal of Real Estate 14th Edition as follows: "Comparable sales that occurred under market conditions different from those applicable to the subject on the effective date of appraisal require adjustment

relies upon market conditions trends tracked by credible agencies such as the Federal Housing Finance Agency ("FHFA"), who maintains a House Price Index ("HPI")<sup>12</sup> for macro and micro regions in the United States. A market conditions adjustment is a variable that affects all properties similarly and can be adjusted for in an objective manner.

- To make direct comparisons, the sale price of the Control Area Sales was adjusted for market conditions to a common date. In this analysis, the common date is the date of the Test Area Sale(s). After adjustment, any measurable difference between the sale prices would be indicative of a possible price impact by the solar facility.
- If there is more than one Test Area Sale to evaluate, the sales are grouped if they exhibit similar transactional and physical characteristics; otherwise, they are evaluated separately with their own respective Control Area Sale groups.

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for any differences that affect their values. An adjustment for market conditions is made if general property values have increased or decreased since the transaction dates."

<sup>12</sup> The FHFA HPI is a weighted, repeat-sales index, meaning that it measures average price changes in repeat sales or re-financings on the same properties. This information is obtained by reviewing repeat mortgage transactions on single-family properties whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac since January 1975. The FHFA HPI serves as a timely, accurate indicator of house price trends at various geographic levels. Because of the breadth of the sample, it provides more information than is available in other house price indexes.

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## TECHNIQUE 1: REVIEW OF PUBLISHED STUDIES

The following is a discussion of various studies that consider the impact of solar farms on surrounding property values. The studies range from quantitative analysis to survey-based formal research to less-formal analyses.

### ACADEMIC REPORTS

There have been six academic reports that attempt to quantify the effect on property values due to proximity to solar. We have discussed them next, in order of publication date:

- i. The first report is a study completed by **The University of Texas at Austin**, published in May 2018.<sup>13</sup> The portion of the study focusing on property impact was an Opinion Survey of Assessors with no sales data or evidence included in the survey. The opinion survey was sent to 400 assessors nationwide and received only 37 responses. Of those 37 assessors, only 18 had assessed a home near a utility-scale solar installation, the remainder had not. Of the 18 assessors with experience in valuing homes near solar farms, 17 had not found any impact on home values near solar. Those are the actual facts in the study. A small number of those assessor respondents hypothetically surmised an impact, but none had evidence to support such statements.

The paper admits that there is no actual sales data analyzed, and further denotes its own areas of weakness, including “This study did not differentiate between ground-mounted and rooftop installations.” The author states on the last line of page 22: ***“Finally, to shift from perceived to actual property value impacts, future research can conduct analyses on home sales data to collect empirical evidence of actual property value impacts.”***

The paper concludes with a suggestion that a statistic hedonic regression model may better identify impacts. It should be noted that the type of statistical analysis that the author states is required to determine “*actual property value impacts*” was completed two years later by the following Academic Studies.

- ii. The second report is a study prepared by a team at the **University of Rhode Island**, published in September 2020, “*Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island*.”<sup>14</sup> The study utilized a hedonic pricing model, or multiple regression analysis, to quantify the effect of proximity on property values due to solar by studying existing solar installations in Massachusetts and Rhode Island. The study evaluated 208 solar facilities, 71,373 housing sales occurring within one-mile of the solar facilities (Test Group), and 343,921 sales between one-to-three miles (Control Group). Because it is a hedonic regression model, it allowed them to isolate specific variables that could impact value, including isolating

<sup>13</sup> Al-Hamoodah, Leila, et al. An Exploration of Property-Value Impacts Near Utility-Scale Solar Installations. Policy Research Project (PRP), LBJ School of Public Affairs, The University of Texas at Austin, May 2018, [emp.lbl.gov/sites/default/files/property-value\\_impacts\\_near\\_utility-scale\\_solar\\_installations.pdf](http://emp.lbl.gov/sites/default/files/property-value_impacts_near_utility-scale_solar_installations.pdf).

<sup>14</sup> Gaur, V. and C. Lang. (2020). Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island. Submitted to University of Rhode Island Cooperative Extension on September 29, 2020. Accessed at <https://web.uri.edu/coopext/valuing-sitingoptions-for-commercial-scale-solar-energy-in-rhode-island/>.

rural and non-rural locations. The study defines “**Rural**,” as an area having a “population density of 850 people per square mile or fewer.”

The study provides data which found no negative impact to residential homes near solar arrays in rural areas: “these results suggest that [the Test Area] in rural areas **is effectively zero** (a statistically insignificant 0.1%), and that the negative externalities of solar arrays are only occurring in non-rural areas.”<sup>15</sup> Further, the study tested to determine if the size of the installation impacted values, and found no evidence of differential property values impacts by the solar installation’s size.

Thus, not only are there no impacts to homes in similar areas as the proposed Project, but any differences in the size of a solar farm are similarly not demonstrating an impact.

- iii. The third report is a published study prepared by Dr. Nino Abashidze, School of Economics, **Georgia Institute of Technology**, dated October 20, 2020, entitled “*Utility Scale Solar Farms and Agricultural Land Values*.” Abashidze examined 451 solar farms in North Carolina. “Across many samples and specifications, we find **no direct negative or positive spillover effect of a solar farm construction on nearby agricultural land values**. Although there are no direct effects of solar farms on nearby agricultural land values, we do find evidence that suggests construction of a solar farm may create a small, positive, option-value for landowners that is capitalized into land prices. Specifically, after construction of a nearby solar farm, we find that agricultural land that is also located near transmission infrastructure may increase modestly in value.”
- iv. On March 1, 2023, an article was prepared by the Energy Analysis and Environmental Impacts Division, **Lawrence Berkeley National Lab**, Berkeley, CA (“BNL”), which measured 1.8 million residential transactions around solar facilities greater than 1 MW in the states of CA, CT, MA, MN, NC and NJ. The article notes that for the overwhelmingly majority of the transactions (in the states of CA, CT and MA), no impact was measured near large-scale photo-voltaic facilities or LSPV’s. The authors of the study similarly released a webinar discussing the study, as well as key limitations of the study, as follows:
  - The dataset is centered on relatively small projects in relatively urban areas... Our results should not be applied to larger projects, e.g., those >18 MW, and, of course projects built far from homes.
  - [The] study did not consider site design, setbacks or landscaping features...
  - Across the full dataset (all 6 states) only larger projects (greater than 12 acres) are correlated with a loss in house prices within 0.5 miles (compared to 2-4 miles away); BUT this analysis only applies to relatively small projects (90% are less than 35 acres/8 MW), so “large” is relative to the median of 12 acres.
  - Only 6 states are included; therefore, the results would not necessarily apply outside the sample area.

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<sup>15</sup> The University of Rhode Island study’s conclusion that there may be an impact to non-rural communities is surmised is that “land is abundant in rural areas, so the development of some land into solar does little to impact scarcity, whereas in non-rural areas it makes a noticeable impact.”



Given these limitations, we do not believe the study is overwhelmingly conclusive, and, if any, only presents limited data showing a rather small impact in certain areas. The states showing no impact reflect 68.6% of all the transactions studied.

Our review of the study revealed key questions that we believe limit the applicability of the study as a whole:

1. The study does not show the data for the largest of the solar facilities mapped and whether those reveal transactions that are consistent with the study's results (i.e., solar facilities greater than 8 MW in all six states). We would hypothesize that the largest of the facilities would show the greatest amount of impact; this is not expressed (and so likely not true). Further, our own studies of the largest facilities in Minnesota (the 100 MW North Star Solar Farm) rebut the study's results.
2. There was no effort by the authors to interpret whether other adjacent property next to solar facilities might also impact local residential values. This could include large commercial buildings, office towers, industrial developments or highways. This might have swayed the results.
3. Data results are somewhat contrary to common reason – for example, their conclusions indicate a negative impact in rural areas, insignificant impact in urban areas, but overwhelmingly positive results for "urban cluster" areas. This diverges from the theory that density and impact correlate.
4. Data results using similar methodology in the URI study reveal contrary results: while the URI study found no impact in rural communities, the BNL study indicates some very small degree of impact, and while the BNL study showed no impact in suburban areas, the URI did show a rather small impact. The results, therefore, are mixed and do not indicate consistent and measurable evidence.
5. Whether the results of -1.5% is applicable in terms of its relative degree. This is a rather small percentage and most appraisers and valuation professionals would find it difficult to profess this is of a magnitude that would be recognized in the market.

The BNL study does represent the largest study to date on the topic of solar farms and property values. We find that the majority of the data indicates no impact. The authors themselves suggest additional focus as follows: "more research is needed to understand the heterogeneity that we observe with respect to larger, agricultural and rural LSPVs [in the MN, NJ and NC contexts]. Here, surveys, qualitative research, mixed-methods, and case study-based approaches may indicate how neighbors of LSPVS engage differently with their nearby solar installations based on its size, land use, or the urbanicity of their home." CohnReznick agrees with the BNL suggestion – and covers specifically this request in our own studies within Minnesota and North Carolina, as well as several other solar farms of various sizes in various locations.

- v. In April 2024 **Lawrence Berkeley National Lab**, published a report titled **Perceptions of Large-Scale Solar Project Neighbors: Results From a National Survey**.<sup>16</sup> Authored by Joseph Rand, Ben Hoen, Karl Hoesch, Sarah Mills, Robi Nilson, Doug Bassette and Jack White, the report is a summation of a nearly 1,000-resident

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<sup>16</sup> Rand Joseph, et al. [Perceptions of Large-Scale Solar Project Neighbors: Results From a National Survey](#), Energy Markets & Policy, Berkeley Lab, April 2024, [Perceptions of Large-Scale Solar Project Neighbors: Results From a National Survey | Energy Markets & Policy \(lbl.gov\)](#).

survey. An opinion survey was sent to residents living within three miles of large-scale solar (LSS), and 984 responses were collected. The survey revealed that **“among LSS neighbors, ‘positive’ attitudes outnumber ‘negative’ by nearly a 3 to 1 margin.** Looking across the full set of respondents that were aware of their local LSS project, 43% reported a ‘positive’ or ‘very positive’ attitude toward it, 42% were ‘neutral’, and 15% reported a ‘negative’ or ‘very negative’ attitude. 42% report that they would support additional LSS in their community, compared to 18% that would oppose it.” Additionally, the report noted that “Roughly 1/3 of residents living within 3 miles of LSS projects did not know their local project existed. Those living closest to projects and respondents around the largest projects in our sample (>100 MW) tended to be more familiar with them, but even some respondents living within ½ mile were unaware.”

- vi. In September 2024 a study prepared by Simeng Hao and Gilbert Michaud of **Loyola University Chicago’s** School of Environmental Sustainability was published, “Assessing Property Value Impacts Near Utility-Scale Solar in the Midwestern United State”. The study examined 70 utility-scale solar farms in the states of IL, IN, IA, KS, MI, MN, MO, NE, OH and WI, that were completed between 2009 and 2022 and measured over 20,800 average home values (AHV) from this time period. The study utilized difference-in-differences (DiD) models which compared the change in AHV for “treatment groups”, zip codes which have a utility-scale solar projects, to the change in AHV for “control groups”, zip codes that did not have a utility-scale solar project and were in the same state as the treatment groups. ***The results of the study indicate that utility-scale solar projects increase nearby property values by roughly 0.5-2.0 percent, with smaller projects (less than 20 MW) having more of a positive impact on nearby property values than project over 20 MW.***

The study included models with unadjusted AHV (does not account for increase in value due to market conditions) and adjusted AHV (accounted for increase in value due to market conditions by utilizing the Case Schiller Index, which is measured using data on repeated sales of single-family homes over time). Both models indicated similar results, strengthening the finding of a positive correlation between utility-scale solar projects and nearby property values.

The study further suggested, “the positive correlation between utility-scale solar projects and nearby property values could be due to the new tax revenues, which are often used to support local school and other public services, as well as the local employment opportunities that utility-scale solar projects can provide”.

## VALUATION EXPERT REPORTS

We have similarly considered property value impact studies prepared by other experts, which have also noted that the installation of utility-scale solar on a property has no measurable or consistent impact on adjoining property value. According to a report titled “Mapleton Solar Impact Study” from Kirkland Appraisals, LLC, conducted in Murfreesboro, North Carolina in September 2017, which studied 13 existing solar farms in the state, found that the solar farms had no impact on adjacent vacant residential, agricultural land, or residential homes. The paired sales data analysis in the report primarily consisted of low density residential and agricultural land uses and included one case where the solar farm adjoined to two dense subdivisions of homes.

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Donald Fisher, ARA, who has served six years as Chair of the American Society of Farm Managers and Rural Appraisers, and has prepared several market studies examining the impact of solar on residential values was quoted in a press release dated February 15, 2021 stating, "Most of the locations were in either suburban or rural areas, and all of these studies found either a neutral impact or, ironically, a positive impact, where values on properties after the installation of solar farms went up higher than time trends."

## REAL ESTATE ASSESSOR SOLAR IMPACT REPORTS

The Chisago County (Minnesota) Assessor's Office conducted their own study on property prices adjacent to and in the close vicinity of the North Star solar farm in Chisago County, Minnesota. At the November 2017 Chisago County Board meeting, John Keefe, the Chisago County Assessor, presented data from his study. He concluded that the North Star solar farm had, "no adverse impact" on property values. His study encompassed 15 parcels that sold and were adjacent or in the close vicinity to the solar farm between January 2016 and October 2017; the control group used for comparison comprised of over 700 sales within the county. Almost all of the [Test Area] properties sold were at a price above the assessed value. He further stated that, "It seems conclusive that valuation has not suffered."<sup>17</sup>

Furthermore, Grant County, Kentucky Property Value Administrator, Elliott Anderson, stated that Duke Energy built a solar farm near Crittenden, adjacent to existing homes on Claiborne Drive in December 2017. At the time of the interview, there have been nine arm's length homes sales on that street since the solar farm commenced operations. Each of those nine homes sold higher than its assessed value, and one over 32 percent higher. At the time, Anderson noted that several more lots were for sale by the developer and four more homes were currently under construction. Anderson said that the solar farm had no impact either on adjoining home values or on marketability or desirability of those homes adjacent to the solar farm.

## CONCLUSION

These published studies and other valuation expert opinions, conclude that there is no impact to property adjacent to established solar farms. These conclusions have been confirmed by academic studies utilizing large sales databases and regression analysis investigating this uses' potential impact on property values. Further, the conclusion has been confirmed by county assessors who have also investigated this adjacent land use' potential impact on property values.

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<sup>17</sup> Chisago County Press: County Board Real Estate Update Shows No "Solar Effects" (11/03/2017)

## TECHNIQUE 2: PAIRED SALE ANALYSIS

### SOLAR FARM 1: 2662 FREEPORT SOLAR CSG, STEPHENSON COUNTY, ILLINOIS

**Coordinates:** Latitude 42.33941447101255, Longitude -89.6394781667045

**PIN:** 08-00-13-800-001

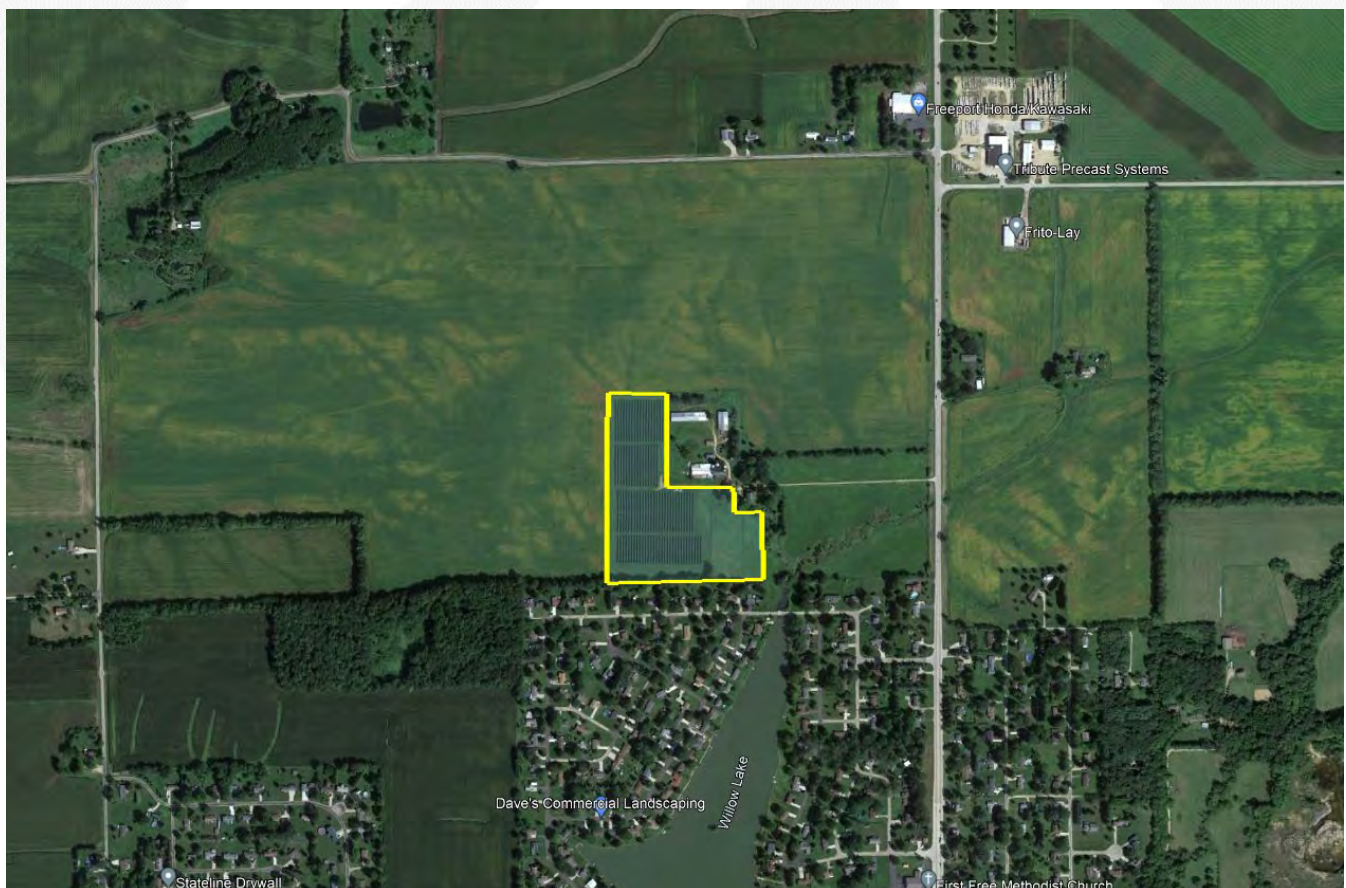
**Total Land Size:** 17.84 acres

**Population Density (2022):** 77 people per square mile (Stephenson County)

**Date Project Announced:** N/A

**Date Project Completed:** December 2020

**Output:** 2.0 MW AC



*Approximate 2662 Freeport Solar CSG boundaries outlined in yellow, aerial imagery provided by Google Earth*

2662 Freeport Solar CSG is located in Stephenson County, Illinois and is accessible via Illinois Route 26 N. The solar farm was developed by Borrego Solar Systems, Inc. and RECON Corporation and the improvements are

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owned by 2662 Freeport Solar I LLC. The solar farm went into operation in December 2020 with a total of 140,438 square feet of solar panels. The 17.84-acre solar farm was located on a larger 45-acre parcel that was replatted in January 2021. The underlying land of the solar farm sold in May 2022 for \$200,000, with a 20-year ground lease for the solar panels. The remaining portion of the parcel – 27.16 acres – includes a single-family home, farm buildings, and farmland and has an easement for access to the solar site.

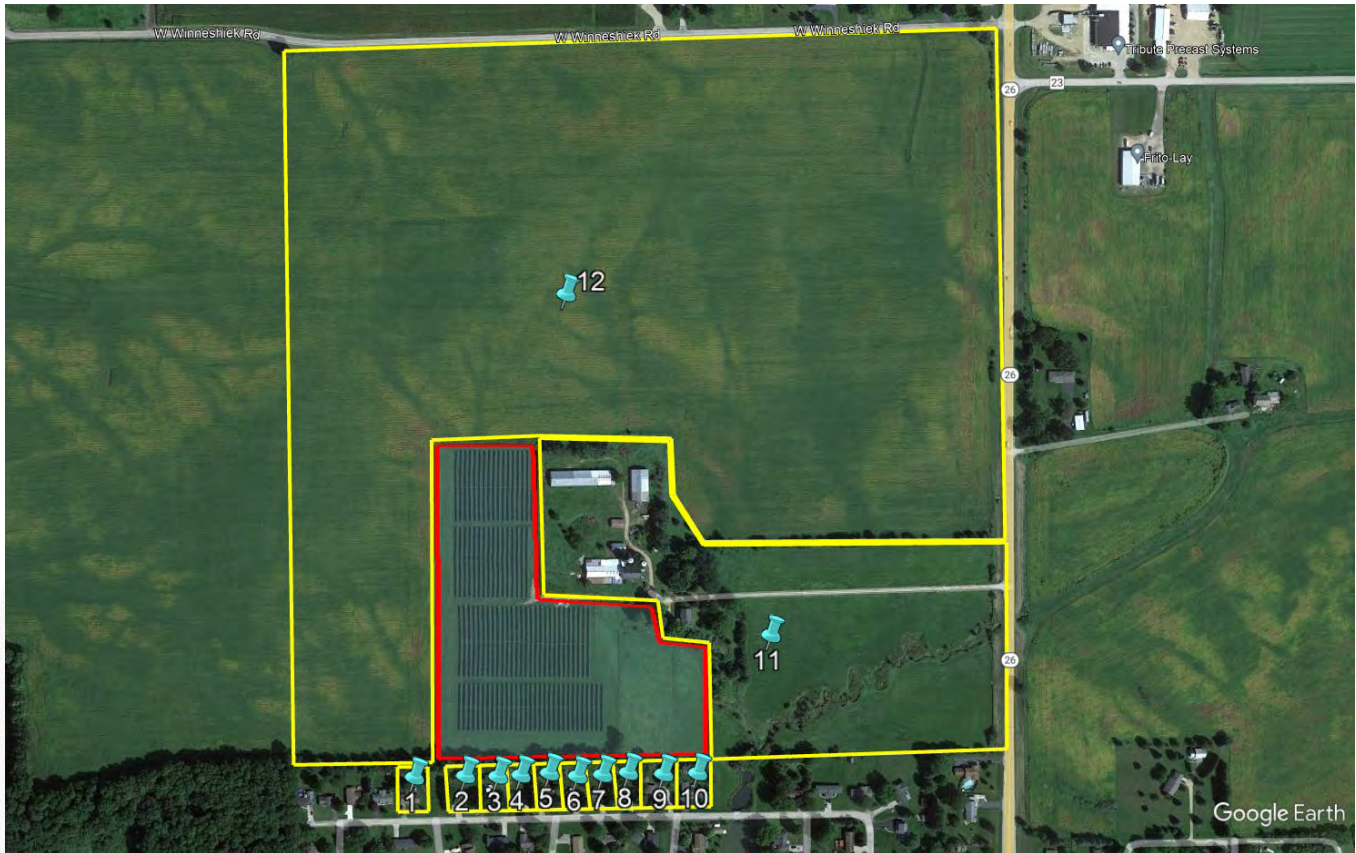
**The Surrounding Area:** The 2662 Freeport Solar CSG installation is located in Stephenson County, directly north of the City of Freeport. Stephenson County is located on the northern border of the state of Illinois, along the border with Wisconsin. The solar site is approximately 3 miles north of downtown Freeport and 100 miles northwest of the City of Chicago.

The 2662 Freeport Solar CSG project is one of 134 solar farms in Illinois and one of nine solar farms located within Stephenson County. The 2662 Freeport Solar CSG project is a similar size to all of the existing solar farms in Illinois with the exception of seven that are significantly larger and have output ranging from 10 to 200 MW. All of the solar farms in Stephenson County have capacity of 2.0 MW, similar to 2662 Freeport Solar CSG.

**The Immediate Area:** The solar farm is located in between W. Winneshiek Road to the north, Jay Street to the south, Blumenthal Road to the west, and Route 26 N to the east. The solar site is surrounded by farmland to the north and west, farmland and farmhouse buildings to the east, and single-family homes in a community surrounding Willow Lake to the south. The parcel lines of the single-family homes to the south are lined with mature trees. The single-family home located adjacent to the east of the solar site is surrounded by mature trees while the farm buildings have direct views of the solar site.

**Real Estate Tax Info:** In 2021 (payable 2022), the assessed value of the improvements was \$145,333 and the owner paid \$16,038 in real estate taxes. The 2021 assessed value of the underlying land was \$2,404 and the participating the landowner paid \$265 in real estate taxes. Prior assessment and tax information was unavailable given the split of the parcels, and the previous assessment and taxes included the larger 45-acre site and structures.

**Adjoining Parcels:** The following map displays the parcel in the solar farm site (outlined in red). Properties adjoining the solar parcels are numbered for subsequent analysis.



*2662 Freeport Solar CSG - Adjoining Properties*

The surrounding area is primarily populated with agricultural uses to the north, east, and west, and a single-family home residential community to the south. Some of the agricultural parcels contain homesteads on the site and others are fully unimproved.

Adjoining Properties 4, 6, 8, and 9 have no sales data. Therefore, Adjoining Properties 4, 6, 8, and 9 are excluded from further analysis.

Recall, the solar farm under analysis began operations in December 2020. Adjoining Properties 1, 3, 5, 7, and 12 were sold in 2003, 2019, 2002, 2012, and 2008, respectively. These sales did not occur within a reasonable time period prior to /completion. Therefore, Adjoining Properties 1, 3, 5, 7, and 12 were excluded from further analysis.

Adjoining Property 11 sold in December 2021 and is comprised of 27 acres. Adjoining Property 11 consists of the remaining portion of the solar farm's parcel that was subdivided in 2020. Adjoining Property 11 includes a farmhouse, farm buildings, farmland, and an easement for access to the solar farm. We searched Stephenson County for sales of similar properties to Sale 3 with large areas of farmland and farm buildings and only found two comparables sales more than 15 acres. We excluded Adjoining Property 11 as a Test Area Sale given the easement and limited comparable Control Area Sales.

Therefore, we have only considered Adjoining Properties 2 and 10 for paired sales analysis (identified as Test Area Sales 1 and 2 going forward).

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## PAIRED SALES ANALYSIS

We considered only one type of paired sales analysis, which was comparing sales of properties not proximate to the solar farm (Control Area Sales) to the sales of adjoining properties after the completion of the solar farm project (Test Area Sales). Test Area Sales 1 and 2 are located in the single-family residential subdivision adjacent to the south of the solar farm and have been utilized as a group of test sales.

We identified Control Area Sale data through the RealQuest database which aggregates real estate sales from public record. We verified these sales through county records and conversations with brokers and sellers. We excluded sales that were not arm's length, such as REO sales or bank-owned properties, or those between related parties.

It is important to note the these Control Area Sales are not adjoining to any solar farm, nor do they have a view of one from the property. Therefore, the announcement nor the completion of the solar farm use could not have impacted the sales price of these properties. Additionally, these Control Area Sales are all located within a one mile radius of the 2662 Freeport Solar CSG project.

Test Area Sale 1 sold in November 2020 for \$140,000 after being on the market for 40 days. The property is a single-story 1,750 square foot home with a 2-car attached garage, located on a 0.5-acre lot. The improvements on this property are located approximately 230 feet to the nearest solar panel while the property line is approximately 100 feet to the nearest solar panel. Test Area Sale 2 sold in January 2021 for \$150,000 after being on the market for 51 days. The property is a one- to two-story 2,009 square foot home with a 2-car attached garage and 2.5-stall detached garage, located on a 0.5-acre lot. The improvements on this property are located approximately 330 feet to the nearest solar panel while the property line is approximately 280 feet to the nearest solar panel.

The table on the following page outlines the characteristics of the Test Area Sales.



Test Area Sale 1



Test Area Sale 2

2662 Freeport Solar 1 CSG Test Area Sales										
Sale #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price/ SF	Sale Date
1	1424 Jay St. Freeport, IL 61032	\$140,000	3	2.0 (1 full, 2 half)	1979	1,750	1-story SFH with 2-car attached garage	0.5	\$80.00	Nov-20
2	1226 Jay St. Freeport, IL 61032	\$150,000	3	2.5	1977	2,009	1-2 story SFH with 2-car attached garage and detached 2.5 stall garage	0.5	\$74.66	Jan-21

We analyzed 14 Control Area Sales of single-family homes with similar construction and use that were not located in close proximity to the solar farm, that sold within 12 months from the median sale date of the Test Area Sales. The Control Area Sales are single-family homes with three to four bedrooms and 2 to 2.5 baths, consist of between 1,200 square feet and 2,300 square feet of gross living area, and built between 1957 and 1993. The Control Area Sales have a partial unfinished basement or finished basement, and are located on lots between 0.3 and 0.6 acres in size.

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the 2662 Freeport Solar CSG project is presented below.

CohnReznick Paired Sales Analysis 2662 Freeport Solar 1 CSG		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Test Area Sales (2)	Yes: Adjoining solar farm	\$77.33
Control Area Sales (14)	No: Not adjoining solar farm	\$76.08
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		1.65%

The marketing time (from list date to closing date) for Control Area Sales ranged from 16 to 87 days on market with a median of 61 days. The marketing time for to Test Area Sales ranged from 40 to 51 days, which is within the range of the Control Area Sales and below the median, **and we note no significant marketing time differential.**

**The small differential between the Test Area Sale and the Control Area Sales is within the range of normal market variance,** and therefore it does not appear that the 2662 Freeport Solar CSG installation impacted the sale price of the Test Area Sales.

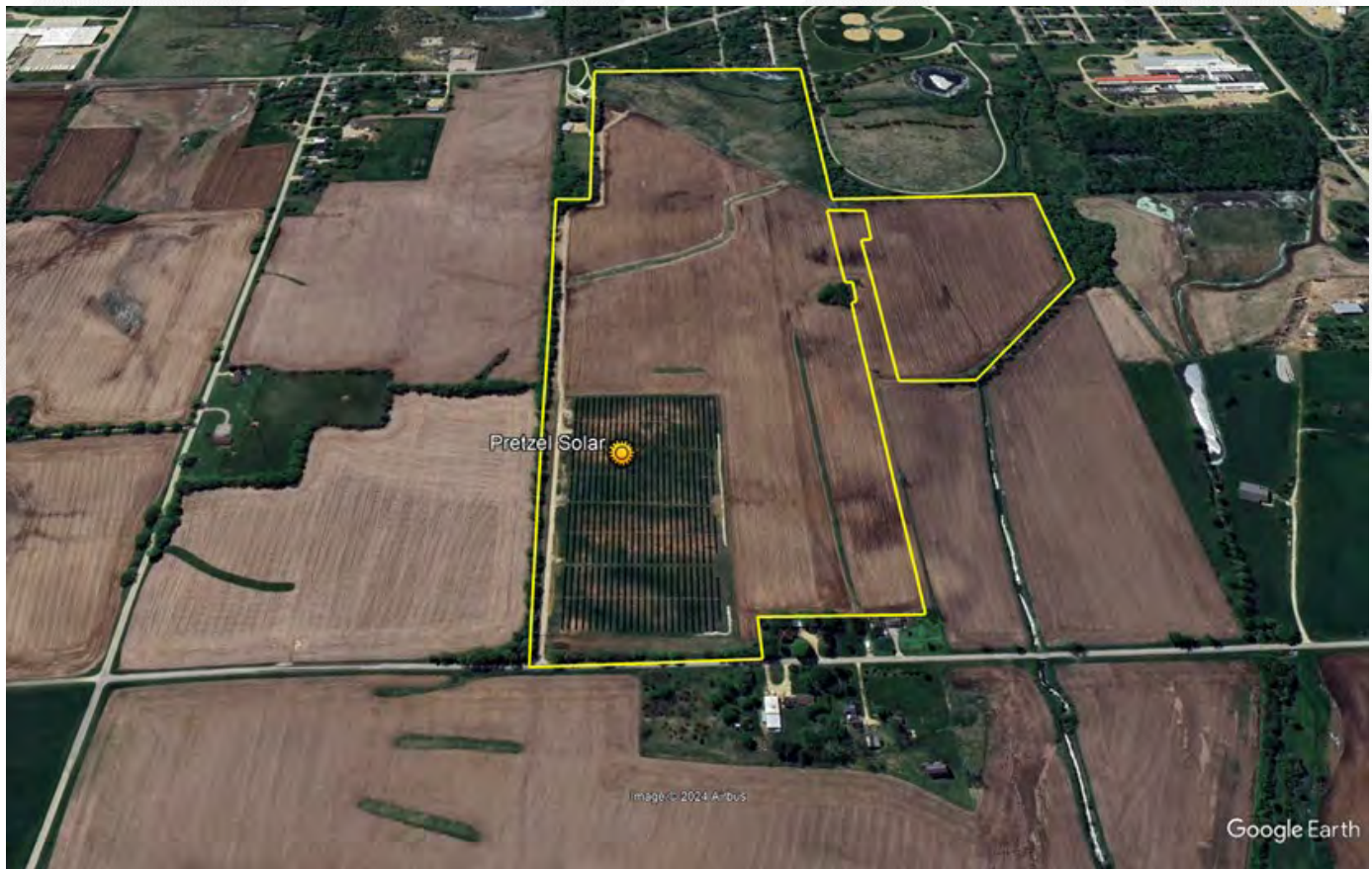
We contacted the selling broker of Test Area Sale 2, Julie Wenzel of RE/MAX Town Lake & Country, who indicated that proximity to the solar farm did not impact the sale of the property.

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Additionally, we spoke with Cami Grossenbacher, Stephenson County Deputy Assessor, who stated that there has been no impact on property values due to their proximity to the 2662 Freeport Solar CSG project.

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**SOLAR FARM 2: PRETZEL CSG SOLAR FARM, STEPHENSON COUNTY, ILLINOIS****Coordinates:** Latitude 42.307119, Longitude -89.5981**PINs:** 07-00-29-800-016**Total Land Size:** Approximately 15 Acres**Population Density (2022):** 77 people per square mile (Stephenson County)**Date Project Announced:** August 2019**Date Project Completed:** March 2022**Output:** 2.0 MW AC

*Approximate Pretzel CSG Solar boundaries outlined in yellow, aerial imagery provided by Google Earth dated May 2023*

The Pretzel Community Solar Garden (“Pretzel Solar”) use is located in Stephenson County, Illinois and is between East Currier Avenue to the north, East Stephenson Street to the south, North Henderson Road to the west and North Tower Road to the east.

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The solar farm was developed by Cypress Creek Renewables and Clearway Energy and the improvements are owned by Pretzel Solar, LLC. The solar farm went into operation in March 2022 with a total of 640,000 square feet of solar panels. The 15-acre solar farm is located on a larger 135-acre parcel, which consists of vacant agricultural land.

**The Surrounding Area:** The Pretzel Solar installation is located in central Stephenson County, Illinois, just outside of the City of Freeport to the southwest, and approximately 30 miles northwest of the City of Rockford, in the northern portion of Illinois. The solar site is approximately five miles southeast of the City of Dubuque, Iowa, and 30 miles northwest of the City of Rockford. The solar site is approximately 40 miles east of the Iowa state border and 10 miles south of the Wisconsin state border.

The Pretzel Solar project is one of the 147 solar farms in Illinois and is one of twelve solar farms located within Stephenson County, Illinois. The Pretzel Solar project is the second largest solar farm in Stephenson County while the High Point Solar farm, which produces an output of 100 MW, is largest solar farm in Stephenson County.

**The Immediate Area:** The solar farm is located on an approximately 135-acre leased parcel in Stephenson County, while the solar arrays cover a 15-acre portion of the parcel, and is immediately surrounded by primarily agricultural land with residential homestead properties interspersed throughout the surrounding Project area.

To the southwest lies more densely concentrated residential properties in the City of Freeport, within one-mile from the Project site.

**Real Estate Tax Info:** Prior to the development of the solar farm one “child” parcel was created, from the “parent” parcel owned by the property owners of the leased site, to assess the Pretzel Solar project. The parcel on which the Pretzel Solar project is located was not created until the solar farm was constructed and no taxes were paid for the 2021 tax year. In 2022, after the completion of the solar farm, the assessed value of the participating parcel increased to \$157,642 and real estate taxes increased to \$2,658.

Pin	Acres	2021 Taxes Paid	2022 Taxes Paid	Tax Increase	2021 Assessed Value	2022 Assessed Value	Value Increase
Stephenson County, IL							
07-00-29-800-016	134.9	\$0	\$2,658	-	\$0	\$157,642	-
Total	134.9	\$0	\$2,658	-	\$0	\$157,642	-

The following maps display the parcels developed with the solar farm (outlined in yellow). Properties immediately adjoining the solar parcels (outlined in blue) are numbered for subsequent analysis. It is noted that the aerial imagery provided by Google Earth is dated May 2023.





*Pretzel CSG – Adjoining Properties*

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## PAIRED SALES ANALYSIS

We considered only one type of paired sales analysis, which was comparing sales of properties not proximate to the solar farm (Control Area Sales) to the sales of adjoining properties (Test Area Sales) after the completion of the solar farm project.

We identified Control Area Sale data through the Zillow.com database and verified these sales through county records and conversations with brokers and sellers. We have excluded sales that were not arm's length, such as REO sales or bank-owned properties, or those between related properties.

It is important to note the Control Area Sales are not adjoining to any solar farm, nor do they have a view of one from the property. Therefore, the announcement nor the completion of the solar farm use could not have impacted the sales price of these properties.

### Group 1 – Improved Single-Family Residential Properties

Adjoining Property 3 to the Pretzel Solar Project was considered for a paired sales analysis, and we have analyzed this property as a single-family home use in Group 1. The property is a split level 1,900 square foot home with an unfinished basement and a four car detached garage, located on a 0.73-acre lot that sold in December 2023. This property line is approximately 475 feet from the closest solar panel, and the improvements are approximately 490 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 3.

SUMMARY OF TEST AREA SALE Group 1 - Pretzel CSG										
Adj. Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
3	603 E. Currier Road	\$185,000	3	2.0	1941	1,900	1.5-Story SFH with Unfinished Basement and 4-Car Detached Garage	0.73	\$97.37	Dec-23

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*Test Area Sale 1, aerial imagery provided by Google Earth, dated May 2023*

We analyzed five Control Area Sales of single-family homes with similar construction and use that were located within Stephenson County, that sold within a reasonable time frame from the sale date of the Test Area Sale in Group 1. The Control Area Sales for Group 1 are single-family homes located on lots in between 0.29 and 1.38-acres in size with two to three bedrooms and one and a half to three baths, consisting of between 1,553 square feet and 2,240 square feet of gross living area, and built between 1926 and 1951.

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the Pretzel Solar Project – Group 1 is presented below.

CohnReznick Paired Sale Analysis Group 1		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Test Area Sale (1)	Adjoining solar farm	\$97.37
Control Area Sales (5)	No: Not adjoining solar farm	\$90.96
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		7.04%

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**Noting no negative marketing time differential**, Test Area Sale 1 sold in 47 days, while the Control Area Sales sold between 22 and 51 days, with a median time on market of 35 days.

**Noting no significant negative price differential**, with Test Area Sale 1 having a slightly higher unit sale price than the Control Area Sales, it does not appear that the Pretzel installation impacted the sale price of the Test Area Sale.

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**SOLAR FARM 3: STOCKTON DG CSG SOLAR FARM, JO DAVIESS COUNTY, ILLINOIS****Coordinates:** Latitude 42.348183, Longitude -90.01124**PINs:** 17-002-111-10, 17-002-111-20**Total Land Size:** Approximately 23 Acres**Population Density (2022):** 35 people per square mile (Jo Daviess County)**Date Project Construction Began:** August 2020**Date Project Completed:** December 2020**Output:** 1.9 MW AC

*Approximate Stockton DG CSG Solar boundaries outlined in yellow, aerial imagery provided by Google Earth dated May 2023*

The Stockton Distributed Generation Community Solar Garden ("Stockton DG CSG" or "Stockton Solar") use is located in Jo Daviess County, Illinois. The solar farm is located in between Front Avenue to the north, Eugene Street to the south, S. Golf Road to the west and Ward Street to the east.

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The current owner of the solar farm is IGS Stockton DG, LLC, who leases the land from Brewster Cheese Company operates a production facility on the same parcel as the Stockton Solar project, while IGS Energy developed the solar facility. The solar farm went into operation in December 2020 and provides energy for customers of Commonwealth Edison Co (Comed).

**The Surrounding Area:** The Stockton Solar installation is located in eastern Jo Daviess County, Illinois, in the southwest portion of the Village of Stockton, and approximately 50 miles northwest of the City of Rockford, in the northern portion of Ohio. The solar site is approximately 35 miles southeast of the City of Dubuque, Iowa, and 50 miles northwest of the City of Rockford. The solar site is approximately 20 miles east of the Iowa state border and 10 miles south of the Wisconsin state border.

The Stockton Solar project is one of the 147 solar farms in Illinois and is one of two solar farms located within Jo Daviess County, Illinois. The Stockton Solar project is the largest solar farm in Jo Daviess County with the Apple Canyon Lake Solar farm, which produces an output of 1.2 MW, is the second largest solar farm in Jo Daviess County.

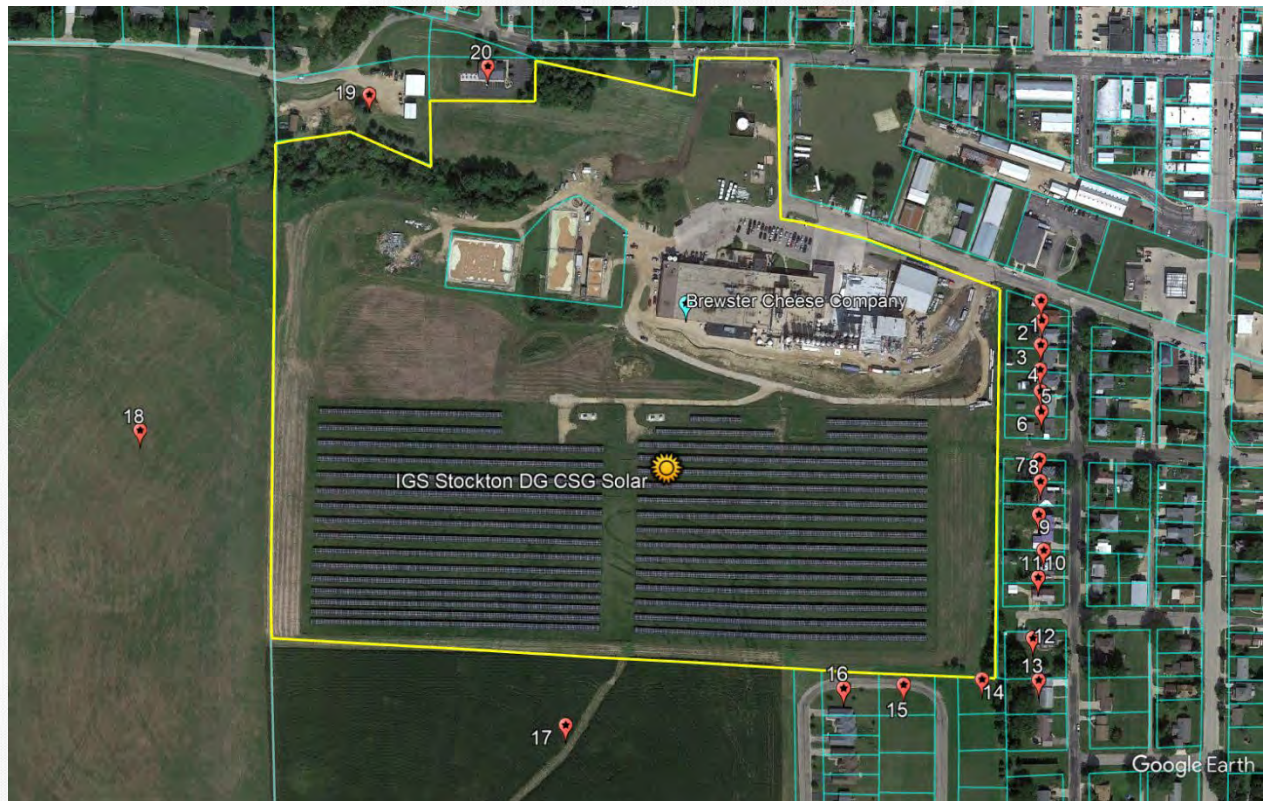
**The Immediate Area:** The solar farm spans over 22 acres in Jo Daviess County and is immediately surrounded by primarily agricultural land with residential homestead properties interspersed throughout the surrounding Project area. The solar farm is situated on a parcel owned by Brewster Cheese Company, who operates a cheese production facility on the site.

To the northeast lies more densely concentrated residential properties in the Village of Stockton, within one-mile from the Project site.

**Real Estate Tax Info:** Prior to the development of the solar farm two “child” parcels were created, from the “parent” parcel owned by Brewster Cheese Company, to assess the Stockton Solar project. The parcels on which the Stockton Solar project is located were not created until the solar farm was constructed and no taxes were paid for the 2020 tax year. In 2021, after the completion of the solar farm, the assessed value of the participating parcels increased to \$296,800 and real estate taxes increased to \$26,874.

Pin	Acres	2020 Taxes Paid	2021 Taxes Paid	Tax Increase	2020 Assessed Value	2021 Assessed Value	Value Increase
Jo Daviess County, IL							
17-002-111-10	11.3	\$0	\$13,437	-	\$0	\$148,400	-
17-002-111-20	11.3	\$0	\$13,437	-	\$0	\$148,400	-
Total	22.7	\$0	\$26,874	-	\$0	\$296,800	-

The following maps display the parcels developed with the solar farm (outlined in yellow). Properties immediately adjoining the solar parcels (outlined in blue) are numbered for subsequent analysis. It is noted that the aerial imagery provided by Google Earth is dated May 2023.



*Stockton DG CSG Solar – Adjoining Properties*



## PAIRED SALES ANALYSIS

In reviewing Adjoining Properties to study in a Paired Sales Analysis, one property and sale was considered but eliminated from further consideration as discussed below.

Adjoining Property 9 was sold on June 1, 2023 for \$110,000 or \$45.83 per square foot of living area, after being on the market. Adjoining Property 9 consisted of a 2-Story SFH with a 3-car attached garage built in 1954 on a 0.44-acre lot. We have not included the sale of Adjoining Property 9 as the transaction was non-arm's length.

### Group 1 – Improved Single-Family Residential Properties

Adjoining Property 6 to the Stockton DG CSG Solar Project was considered for a paired sales analysis, and we have analyzed this property as a single-family home use in Group 1. The property is a single-story 960 square foot home with a two car detached garage and a storage shed, located on a 0.22-acre lot that sold in July 2021. This property line is approximately 200 feet from the closest solar panel, and the improvements are approximately 250 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 6.

SUMMARY OF TEST AREA SALE										
Group 1 - Stockton DG CSG Solar										
Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
1	228 S. Ward Street, Stockton	\$48,500	2	1.0	1923	960	1-Story SFH with 2-Car Detached Garage and Storage Shed	0.22	\$50.52	Jul-21

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*Test Area Sale 1, aerial imagery provided by Google Earth, dated September 2022*



*Test Area Sale 1, Red Arrow indicating location of Stockton DG CSG Solar Farm*

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We analyzed ten Control Area Sales of single-family homes with similar construction and use that were located within the Village of Stockton, that sold within a reasonable time frame from the sale date of the Test Area Sale in Group 1. The Control Area Sales for Group 1 are single-family homes located on lots in between 0.09 and 0.26-acres in size with one to three bedrooms and one to two baths, consisting of between 736 square feet and 1,416 square feet of gross living area, and built between 1910 and 1940.

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the Stockton DG CSG Solar Project – Group 1 is presented below.

CohnReznick Paired Sale Analysis IGS Stockton DG CSG		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price PSF
Test Area Sale (1)	Adjoining solar farm	\$50.52
Control Area Sales (10)	No: Not adjoining solar farm	\$52.20
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		-3.33%

**Noting no negative marketing time differential**, Test Area Sale 1 sold in 74 days, while the Control Area Sales sold between 48 and 683 days, with a median time on market of 116 days.

***The small differential between the Test Area Sale and Control Area Sales is within the range of normal market variace***, and therefore it does not appear that the Stockton DG CSG installation impacted the sale price of the Test Area Sale.



**SOLAR FARM 4: GRAND RIDGE SOLAR FARM, LASALLE COUNTY, ILLINOIS****Coordinates:** Latitude 41.143421, Longitude -88.758340**PINs:** 34-22-100-000, 34-22-101-000**Total Land Size:** 158 acres**Population Density (2022):** 94 people per square mile (LaSalle County)**Date Project Announced:** December 31, 2010**Date Project Completed:** July 2012**Output:** 20 MW AC

This solar farm is located in the southeast quadrant of the intersection of E. 21<sup>st</sup> and N. 15<sup>th</sup> Roads, near Streator, in LaSalle County, Illinois. The solar farm was developed by Invenergy and is part of a renewable energy center known as Grand Ridge. The Energy Center includes the 20 MW AC solar facility, a 210 MW wind farm, and a 36 MW advanced-energy storage facility, all in one local vicinity. The solar site is located adjacent to the south and west of Invenergy's wind farm.

The solar facility consists of twenty individual 1-MW solar inverters and over 155,000 photovoltaic modules manufactured by General Electric.

**The Surrounding Area:** The Grand Ridge Solar Farm is situated just outside of the City of Streator, in Otter Creek Township, in LaSalle County, Illinois. The solar farm is located in a primarily rural part of Illinois, with the nearest interstate, Interstate-55, located approximately 14 miles southeast of the site.

**The Immediate Area:** Within a one-mile radius of the solar farm, surrounding uses mainly consist of agricultural land, with some single-family homes to the west. All of the adjacent land parcels to the solar farm are used for agricultural and/or residential purposes.

The solar site is surrounded by row crops to the north adjoining N. 15th Road. Row crops also adjoin the solar arrays to the east. Scrub shrubbery exists on the western border of the solar site, along E. 21st Road. On the west side of E. 21st Road is the 28-acre private Sandy Ford Sportsmans Club that includes a 12-acre fishing lake. The private Lazy Acres Fishing Club adjoins the solar site to the south and is surrounded by mature trees.

**Real Estate Tax Information:** Prior to development of the solar farm, in 2011, the owner of this 158-acre site paid real estate taxes of \$3,000 annually. In the year following the solar farm development, 2012, real estate taxes increased to approximately \$240,000, a 7,791 percent increase in tax revenue for the site.

PIN	Acres	2011 Taxes Paid	2012 Taxes Paid	Tax Increase	2011 Assessed Value	2012 Assessed Value	Value Increase
<b>LaSalle County, IL</b>							
34-22-100-000	78.99	\$ 1,580	\$ 120,064	7501%	\$ 23,830	\$ 1,812,357	7505%
34-22-101-000	78.80	\$ 1,457	\$ 119,539	8106%	\$ 21,975	\$ 1,804,433	8111%
<b>TOTAL</b>	<b>157.79</b>	<b>\$ 3,036</b>	<b>\$ 239,602</b>	<b>7791%</b>	<b>\$ 45,805</b>	<b>\$ 3,616,790</b>	<b>7796%</b>

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The map on the following page displays the parcels in the solar farm site (outlined in red). Properties adjoining the solar parcels are numbered for subsequent analysis.



*Grand Ridge Solar - Adjoining Properties*

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The surrounding area is primarily populated with agricultural uses. Some of these agricultural parcels contain homesteads on the site and others are fully unimproved.

Adjoining Properties 1,3, 5-7, 13, and 14 have no sales data. Therefore, Adjoining Properties 1,3, 5-7, 13, and 14 are excluded from further analysis.

Recall, the solar farm under analysis was announced on December 31, 2010 and began operations in July 2012. Adjoining Properties 8 and 9 were sold in 1997 and 1996, respectively. These sales did not occur within a reasonable time period prior to announcement/completion. Therefore, Adjoining Properties 8 and 9 were excluded from further analysis.

Adjoining Property 4 sold in March 2011 while construction was ongoing. However, we have not considered this property for a paired sales analysis because the impact of being proximate to the solar farm could not be differentiated from the impact of the construction. Therefore, Adjoining Property 4 was excluded from further analysis.

Adjoining Property 2 transferred in September of 2018 with no consideration amount on a Trustee's deed from Gemini Farms LLC to Bedeker Family Gift Trust. John and Susan Bedeker are owners of the Adjoining Property 1 which is adjacent. This is not considered an arm's length transaction. Therefore, Adjoining Property 2 was excluded from further analysis.

Adjoining Properties 11 and 12 were initially one parcel of 37.07 acres. Adjoining Property 12 sold in October 2016, which is a reasonable time period after completion of the solar farm. When Adjoining Property 12 was sold, the parcel was split into the two-acre homesite, and the 35.07 acre farm, which the Kmetz Trust retained ownership of that 35 acre farm. Therefore, we have excluded Adjoining Property 11 and only considered Adjoining Property 12 (Test Area Sale) for paired sales analysis.

## PAIRED SALES ANALYSIS

We have considered only one type of paired sales analysis, which was comparing sales of properties proximate to the solar farm (Control Area) to the sales of adjoining properties after the completion of the solar farm project (Test Area). We were unable to compare any sales of adjoining properties that occurred prior to the announcement of the solar farm with the sales of the adjoining properties after the completion of the solar farm project as there were no adjoining properties that sold prior to the announcement of the solar farm, within a reasonable period of time.

Adjoining Property 12 (Test Area Sale) was considered for a paired sales analysis, and we analyzed this property as a single-family home use, which is a 2,328 square foot home located on a 2.0- acre parcel that sold in October 2016. This parcel is approximately 366 feet from the closest solar panel, and the improvements are approximately 479 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 12.

SUMMARY OF TEST AND CONTROL AREA SALES										
Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price/SF	Sale Date
Adjoining Property 12	2098 N 15th Rd, Streator, IL	\$186,000	3	4.0	1997	2,328	Single Family Home and Garage and Farm Acreage	2.0	\$79.90	Oct-16

We have found Control Area Sale data through the Northern Illinois Multiple Listing Service (MLS) and verified these sales through county records, conversations with brokers, and the County Assessor's Office. We excluded sales that were not arm's length, such as REO sales or those between related parties. We have excluded any home sites under one acre and included only sales with a similar quantity of bedrooms, bathrooms, and living area. The Control Area single family home sales with greater than one acre of land that are included in this analysis that sold within a reasonable time frame from the sale date of the Test Area Sale and are similar to the Test Area Sale in physical characteristics.

It is important to note that these Control Area Sales are not adjoining to any solar farm, nor do they have a view of one from the property. Therefore, the announcement nor the completion of the solar farm use could not have impacted the sales price of these properties. It is informative to note that the average marketing time (from list date to closing date) for Control Area Sales of 171 days is consistent with the marketing time for Adjacent Property 12 of 169 days. This is an indication that the marketability of the Test Area Sales was not negatively influenced by proximity to the Solar Farm. The Control Area Sales are comparable in most physical characteristics and bracket Adjoining Property 12 reasonably.

We analyzed the five Control Area Sales illustrated above and adjusted the Control Area Sales for market conditions using a regression analysis to identify the appropriate monthly market conditions adjustment. The results of the paired sales analysis for the Grand Ridge Solar Farm are presented below.

CohnReznick Paired Sales Analysis Grand Ridge Solar Farm Adjoining Property 12		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Test Area Sale (1)	Yes: Adjoining solar farm	\$79.90
Control Area Sales (5)	No: Not adjoining solar farm	\$74.35
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		7.46%

The unit sale price of the Test Area Sale was slightly higher than the median adjusted unit sale price of the Control Area Sales.

We contacted the selling broker of the Test Area Sale home, Tina Sergenti with Coldwell Banker, who said that the proximity of the solar farm had no impact on the marketing time or selling price of the home. The Test Area

Sale sold with 169 (5 – 6 months) days on market compared to the control sales, which sold between 10 – 471 days on market (0 and 16 months) on market.

**Noting no negative price differential**, it does not appear that the Grand Ridge Solar Farm impacted the sales price of the Test Sale, Adjoining Property 12. This was confirmed by the real estate agent who marketed and sold this home.



**SOLAR FARM 5: PORTAGE SOLAR FARM, PORTAGE, PORTER COUNTY, INDIANA****Coordinates:** Latitude 41.333263, Longitude -87.093015**PIN:** 64-06-19-176-001.000-015**Total Land Size:** 56 AC**Population Density (2022):** 335 people per square mile (Porter County)**Date Project Announced:** February 2012**Date Project Completed:** September 2012**Output:** 1.96 MW AC (1.5 MW DC)

The solar farm was developed by Ecos Energy, a subsidiary of Allco Renewable Energy Limited, and is currently owned by PLH, Inc. This solar panels are ground-mounted the facility has the capacity for 1.96 Megawatts (MW) AC of power, which is enough to power 300 homes. This solar farm consists of 7,128 solar modules which are of a fixed tilt installation and it contains three inverters.

**The Surrounding Area:** The Portage Solar Farm is located outside the City of Portage, in Portage Township, approximately 2.5 miles to the southeast of the city center. The solar farm is also approximately two miles northwest of South Haven, a neighboring residential community. Portage Township is in the northern portion of Porter County, which is in the northwestern corner of the state of Indiana. The solar farm is approximately 45 miles southeast of downtown Chicago.

**The Immediate Area:** This solar farm is located on the south side of Robbins Road, and is surrounded to the west, south, and east by agricultural land. Just beyond the agricultural land buffer, uses to the west and east area single family homes, and to the south is an apartment complex and a commercial development with an IMAX movie theater and restaurants. To the north of the solar farm, across Robbins Road uses consist of a residential subdivision and vacant land. The solar farm and surrounding properties have a Valparaiso mailing address.

The solar farm is fenced from adjacent properties by a fence that surrounds all of the solar panels. Natural vegetation borders the northern, and eastern sides of the larger agricultural parcel the solar farm is nestled within.

**Real Estate Tax Information:** The taxes on the 56 acres of farmland were \$1,400 per year prior to the solar farm development. After the solar farm was developed, only 13 acres (23 percent of the site) were re-assessed and the remaining 43 acres continued to be farmed. The total real estate tax bill increased to \$16,350 after the solar farm was built, including both uses on the site. This indicates that the real estate taxes for the solar farm increased from \$25 per acre to \$1,175 per acre after the solar farm was developed.

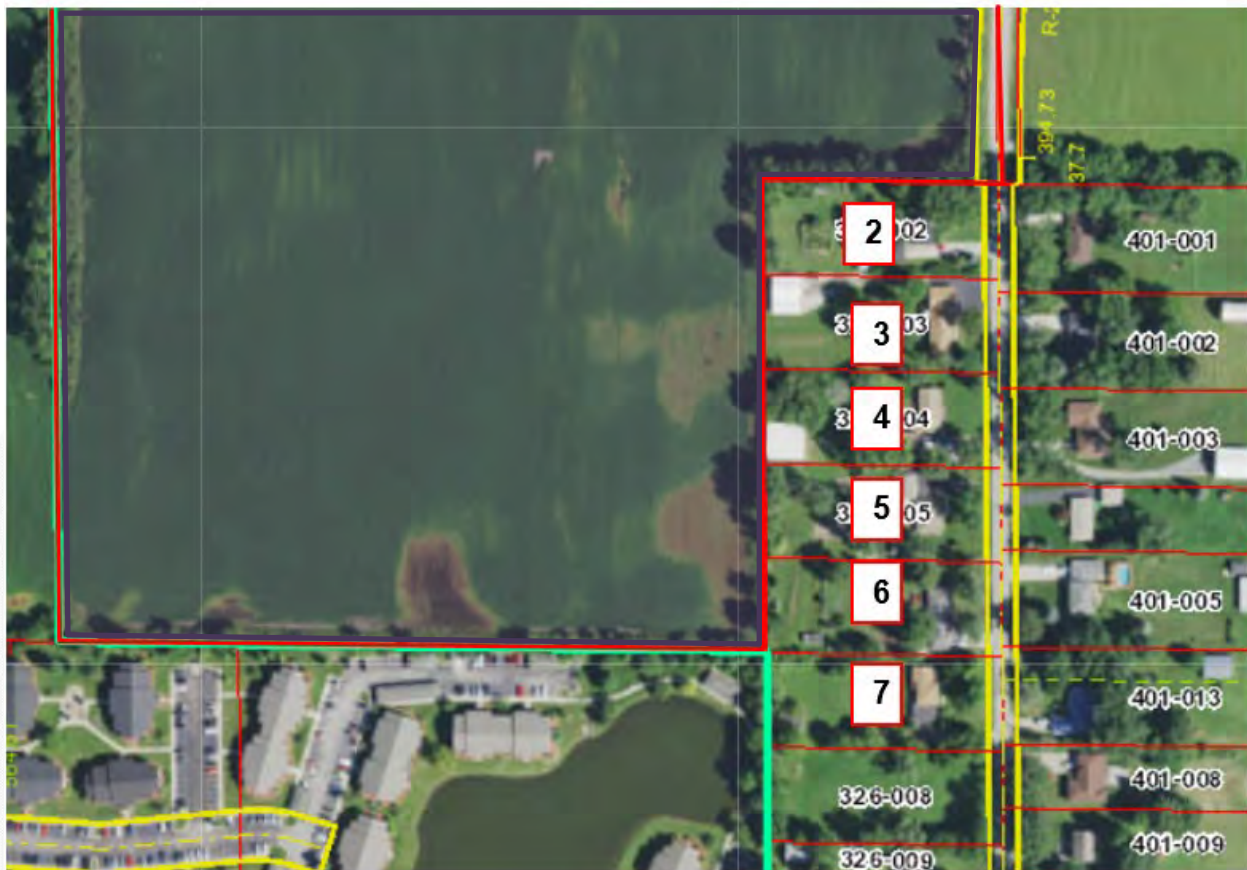
The map on the following page displays the solar farm parcel shaded in blue, and the adjoining properties (outlined in red). Adjoining Properties to the solar farm are numbered for subsequent analysis.



Portage Solar Farm - Adjoining Properties

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*Portage Solar Farm - Adjoining Properties*

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## PAIRED SALES ANALYSIS

Adjoining Properties 1 and 7 (Test Area Sales) were each considered for a paired sales analysis. Adjoining Property 1 was analyzed as homestead-small farmland tract since at the time of purchase the site was used only as agricultural land. The buyer bought it as vacant land and subsequently built a home on the site. Adjoining Property 7 was analyzed as a single-family home use.

### Group 1

For Adjoining Property 1 (Group 1), the property line is approximately 836 feet from the closest solar panel and the residential home that was eventually built is approximately 1,228 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 10.

Portage Solar Test Area Sale Group 1								
Adj. Property #	Address	Sale Price	Site Size (AC)	PI Index (Corn)	Year Built	Vacant at the Time of Sale	Sale Price per Acre	Sale Date
1	442 W 875 N, Valparaiso	\$149,600	18.70	139.30	2017 (After Purchase)	Yes	\$8,000	Feb-14

In Group 1, we analyzed nine Control Area Sales of homesteads-small farmland tracts that sold within a reasonable time frame from the sale date of Adjoining Property 1. All Control Area Sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

The result of our analysis for Group 1 is presented below.

CohnReznick Paired Sale Analysis Portage Solar Group 1		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per Acre
Test Area Sales (1)	Adjoining solar farm	\$8,000
Control Area Sales (9)	No: Not adjoining solar farm	\$7,674
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		4.25%

**Group 2**

For Adjoining Property 7 (Group 2), the residential home is approximately 1,227 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 7.

Portage Solar Test Area Sale Group 2									
Adj. Property #	Address	Sale Price	Site Size (AC)	Beds	Baths	Year Built	Square Feet	Sale Price per SF	Sale Date
7	836 N 450 W Valparaiso	\$149,800	1.00	3.0	1.5	1964	1,776	\$84.35	Sep-13

For Adjoining Property 7, we analyzed seven Control Area Sales of single family homes that sold within a reasonable time frame from the sale date of Adjoining Property 7. All Control Area Sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

The result of our analysis for Group 2 is presented below.

CohnReznick Paired Sale Analysis Portage Solar Group 2		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Test Area Sales (1)	Adjoining solar farm	\$84.35
Control Area Sales (7)	No: Not adjoining solar farm	\$84.27
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		0.10%

Noting the relatively small price differentials between Test Area Sales and Control Area Sales, with both Test Area Sales (Adjoining Property 1 and 7) having higher unit sale prices than the respective Control Area Sales, it does not appear that the Portage Solar Farm had any negative impact on adjacent property values.



**SOLAR FARM 6: SPRING MILL SOLAR, LAWRENCE COUNTY, INDIANA****Coordinates:** Latitude 38.709545, Longitude -89.46968**PINs:** 47-14-12-800-078.019-004**Population Density, Lawrence County (2023):** 100 people per square mile**Total Land Size:** 8.56-acres**Date Project Announced:** N/A**Date Project Completed:** September 2017**Output:** 1.1 MW AC

*Approximate Spring Mill Solar boundaries outlined in yellow, aerial imagery provided by Google Earth dated October 2019*

The Spring Mill Solar project is located in Lawrence County, Indiana and is in between Parks Implement Road to the north, Indiana State Road 37 to the east and is bisected by Clover Lane.

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The current owner of the solar farm is Hoosier Energy Rural Electric Cooperative, Inc., an electric cooperative with ten solar installations, including Spring Mill Solar, within the States of Indiana and Illinois. Hoosier Energy REC, Inc. only serves its' members as a cooperative and is not for-profit, like a majority of major electrical utilities. The solar farm went into operation in September 2017 and is comprised of nearly 4,000 panels.

**The Surrounding Area:** The Spring Mill Solar installation is located in southern Lawrence County, Indiana, approximately 10 miles south of the City of Bedford, in the south-central portion of Indiana. Lawrence County benefits from close proximity to the Naval Support Activity Crane, the third largest naval base in the world located in adjacent Martin County, making defense a prospective industry for growth while the Limestone Mining Industry is the foundation of commerce in Lawrence County. The solar site is approximately 50 miles northwest of the City of Louisville, 70 miles southwest of the City of Indianapolis, and 110 miles southwest of the City of Cincinnati.

The Spring Mill Solar project is one of the 92 solar farms in Indiana and is the sole solar farm located within Lawrence County, Indiana. The Spring Mill Solar project is one of the smaller solar farms in Indiana, with the largest solar farms in the state being the 265 MW Dunn's Bridge Solar farm in Jasper County, the Riverstart Solar Park in Randolph County and the Indiana Crossroads Solar Park in White County, which both produce an output of 200 MW.

**The Immediate Area:** The solar farm is bisected by Clover Lane and is located along Indiana-37 to the east. The solar farm is immediately surrounded by primarily vacant agricultural land with residential homestead properties interspersed to the east and west. Approximately one and a half miles to the north lies more densely concentrated residential and commercial properties in the City of Mitchell.

**Real Estate Tax Info:** In Lawrence County, Indiana, real property is assessed on annual basis as of January 1 each year. The Notice of Assessment is typically sent out to property owners in April of each year and Property tax bills are then due the following May 10<sup>th</sup> and November 13<sup>th</sup> for the preceding tax year. In the State of Indiana, land utilized for solar projects have an additional increase to the assessed land value or, "Solar Base Rate", which is set by the State and ranged from \$5,000 to \$13,000 per acre in 2022.

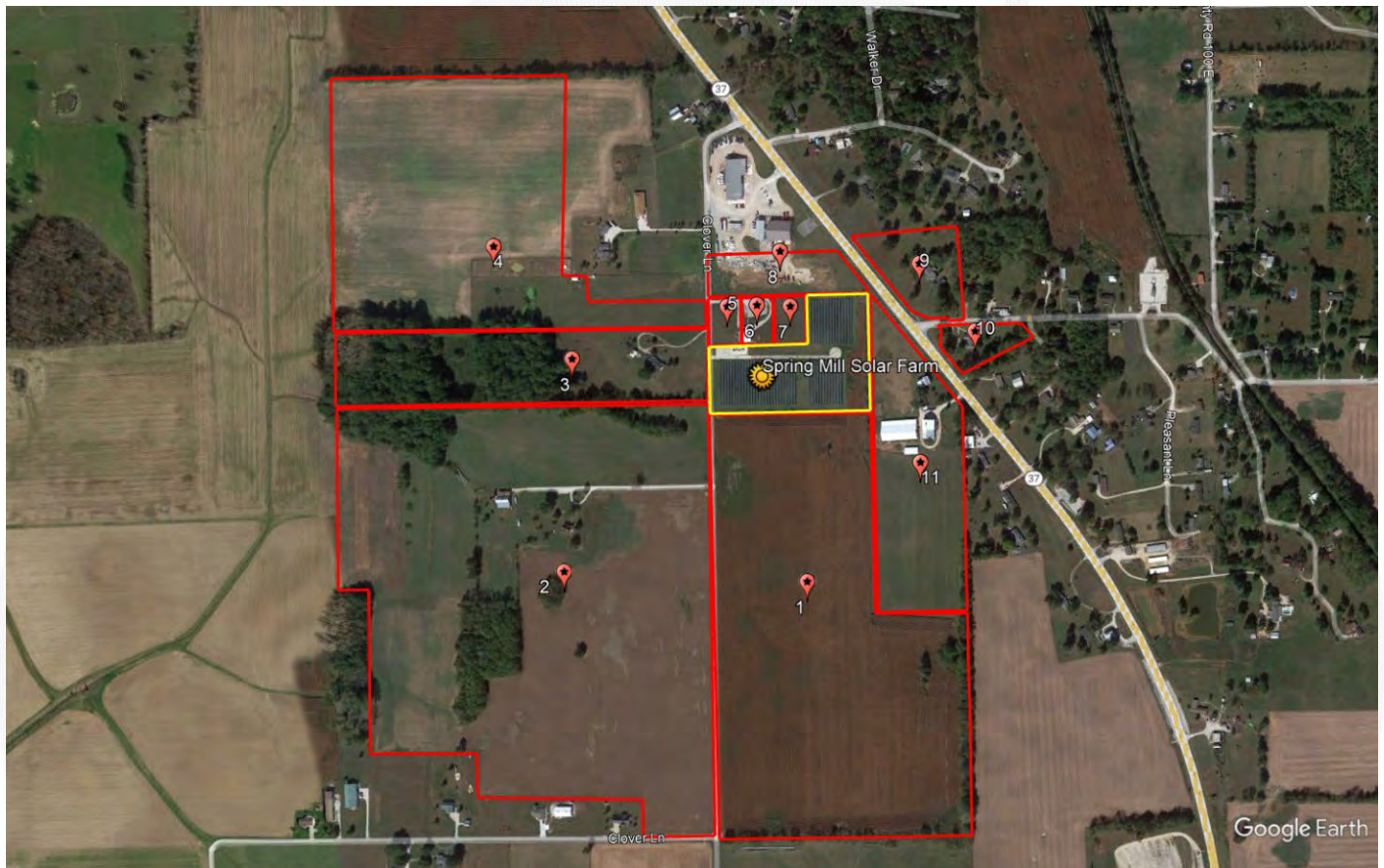
Prior to the development of the solar farm, the underlying land was part of a larger parent parcel (47-14-12-800-033.000-004\*) that is 55.67-acres in size and was split to create a new parcel on which the Spring Mill Solar facility was constructed (47-14-12-800-078.019-004).

In 2017, prior to the property being assessed as a solar farm, the assessed value of the land was \$79,500 and ownership paid \$2,251 in real estate taxes. In 2018, the assessed value increased 131.57 percent to \$184,100 and the real estate tax increased to \$3,459, an increase in tax revenue of 53.71 percent.

Pin	Acres	2017 Taxes Paid	2018 Taxes Paid	Tax Increase	2017 Assessed Value	2018 Assessed Value	Value Increase
47-14-12-800-078.019-004	8.56	-	\$3,459	53.71%	-	\$184,100	131.57%
47-14-12-800-033.000-004*	55.67*	\$2,251	-	-	\$79,500	-	-
Total	8.56	\$2,251	\$3,459	53.71%	\$79,500	\$184,100	131.57%



The following maps display the parcels developed with the solar farm (outlined in yellow). Properties immediately adjoining the solar parcels (outlined in red) are numbered for subsequent analysis. It is noted that the most recent and available aerial imagery provided by Google Earth is dated October 2019.



*Spring Mill Solar – Adjoining Properties*

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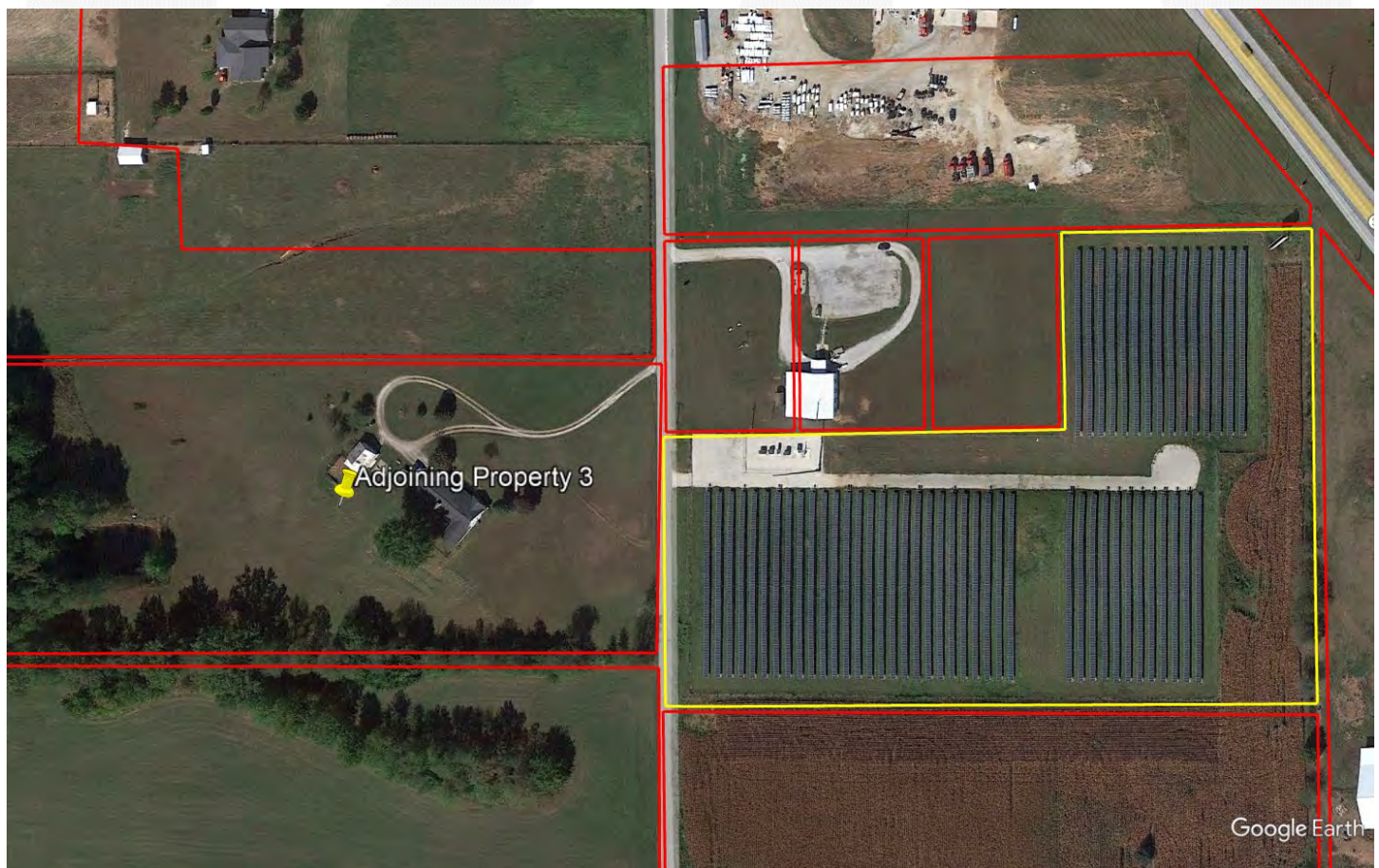


## PAIRED SALES ANALYSIS

### Group 1 – Improved Single-Family Residential Properties

Adjoining Property 3 to the Spring Mill Solar Project was considered for a paired sales analysis, and we have analyzed this property as a single-family home use in Group 1. The property is a one-story, 2,710 square foot home with an attached garage and a pole barn (in need of roof replacement at the time of sale), located on a 17.50-acre lot that sold in June 2021. This property line is approximately 55 feet from the closest solar panel, and the improvements are approximately 275 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 3.

SUMMARY OF TEST AREA SALE Group 1 - Spring Mill Solar										
Adj. Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
3	1933 Clover Lane, Mitchell	\$265,000	3	2.5	1972	2,710	1-Story SFH with Attached Garage and Pole Barn (in need of roof replacement)	17.50	\$97.79	Jun-21



Spring Mill Solar Farm – Test Area Sale Map, Group 1

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We analyzed seven Control Area Sales of single-family homes with similar construction and use that were located within Lawrence, Orange, Washington, Martin and Jackson Counties, that were not located in close proximity to Spring Mill Solar, that sold within a reasonable time frame from the sale date of the Test Area Sale in Group 1. The Control Area Sales for Group 1 are single-family homes located on lots between 5.5- and 17.25-acres in size with three to four bedrooms and two to three baths, consisting of between 2,305 square feet and 3,016 square feet of gross living area, and built between 1968 and 1981. The Control Area Sales also have two-car garage parking and a majority of the Control Area Sales have farm structures such as pole barns, workshops or utility sheds.

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the Spring Mill Solar Farm – Group 1 is presented below.

CohnReznick Paired Sale Analysis Spring Mill Solar Group 1		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Test Area Sale (1)	Adjoining solar farm	\$97.79
Control Area Sales (7)	No: Not adjoining solar farm	\$100.84
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		-3.03%

We spoke with Christina Root, listing agent for 1933 Clover Lane, who stated that the buyers were very familiar with the area and were not concerned about the adjacent Spring Mill Solar Farm. Additionally, Ms. Root indicated that the Spring Mill Solar Farm had no impact on the final sale price as the property sold for its' listed price after just over one month on the market.

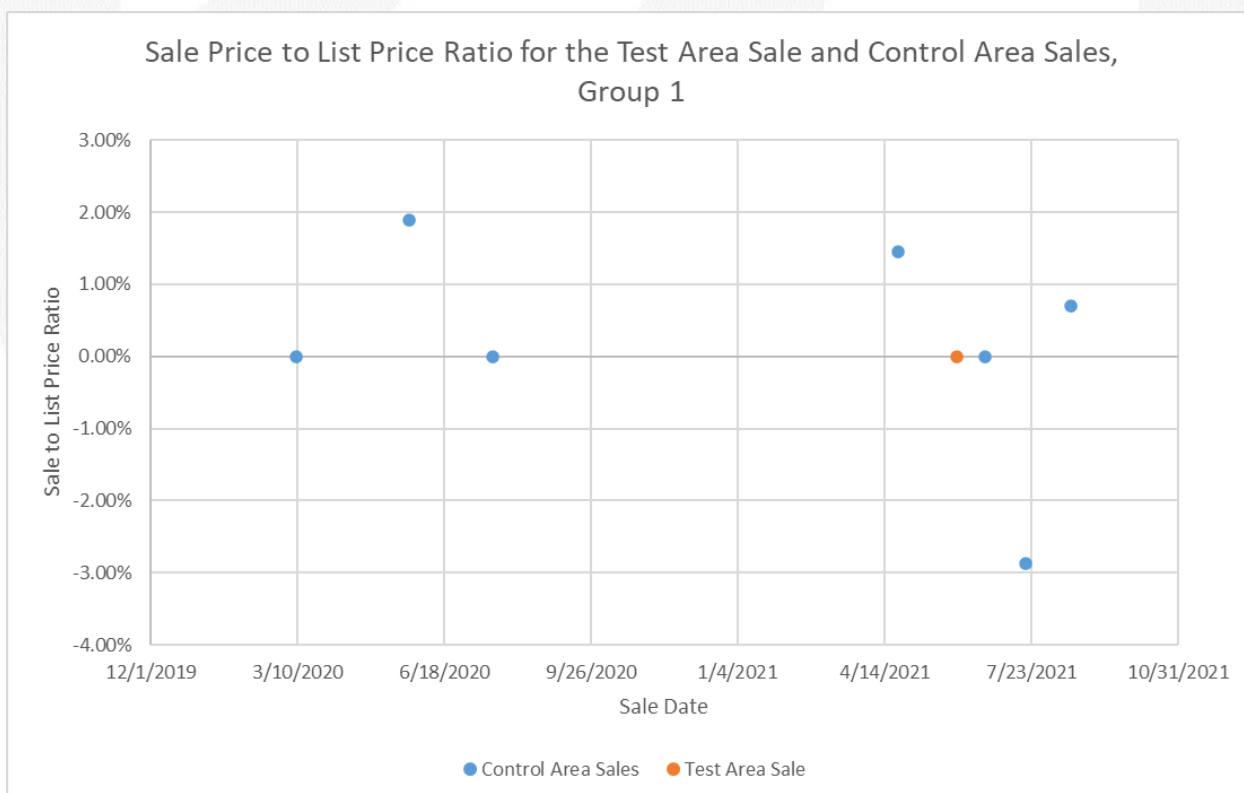
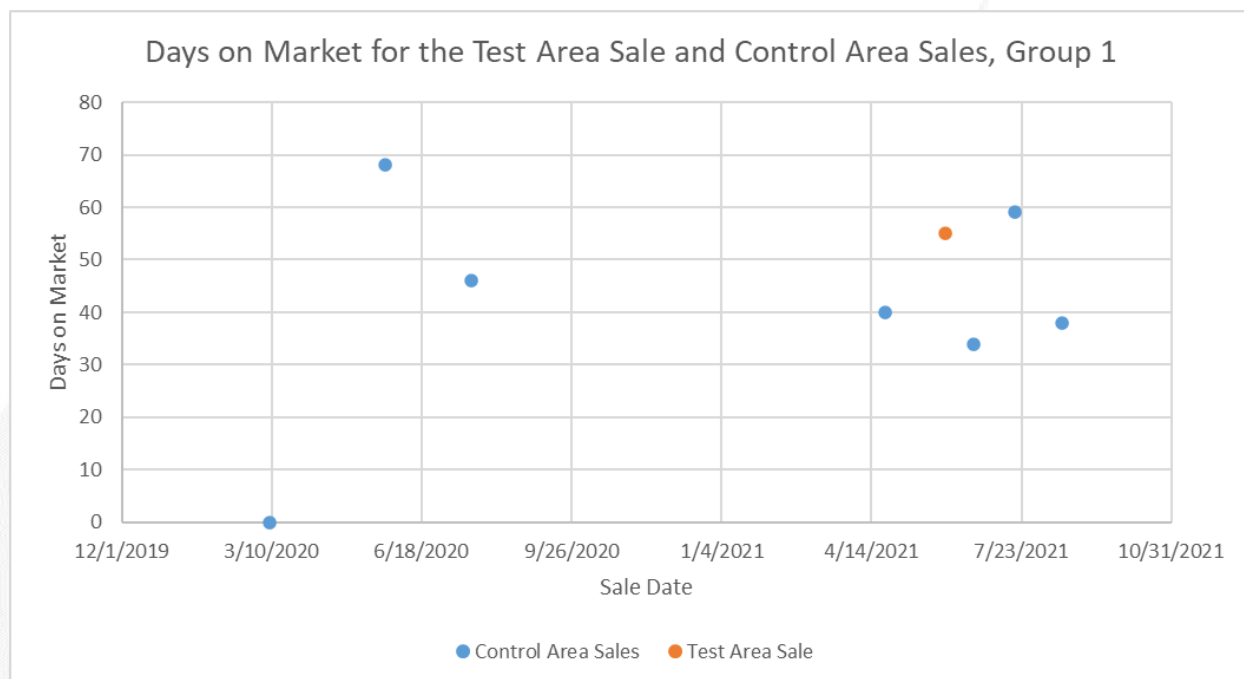
We note that the Test Area Sale in Group 1 included a pole barn with a roof needing replacement at the time of sale and none of the control sales indicated having deferred maintenance when sold.

**Noting no negative marketing time differential**, Test Area Sale 1 sold in 55 days, while the Control Area Sales sold between 34 and 68 days, with a median time on market of 43 days. Additionally, the Control Area Sales sold between 2.87 percent below to 1.89 percent above their listing price while Test Area Sale 1 sold at its' listing price, which is within the range of the Control Area Sales.

**The small differential between the Test Area Sale and the Control Area Sales is within the range of normal market variance**, and therefore it does not appear that the Spring Mill Solar Farm impacted the sale price of the Test Area Sale. We note that the control data had a higher median year built, representing more recently constructed residences, which likely explains the relative difference in adjusted median price per square foot.

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## Group 2 – Improved Single-Family Residential Properties

Adjoining Property 10 to the Spring Mill Solar project was considered for a paired sales analysis, and we have analyzed this property as single-family home use in Group 2. The property is a one-story 2,706 square foot home with an attached garage and pole barn, located on a 1.43-acre lot and sold in August 2023. The improvements on this property are located approximately 575 feet to the nearest solar panel while the property line is approximately 450 feet to the nearest solar panel. The following table outlines the other important characteristics of Adjoining Property 10.

SUMMARY OF TEST AREA SALE Group 2 - Spring Mill Solar										
Adj. Property #	Address	Sale Price	Beds	Baths	Year Built	Home Size (SF)	Improvements	Site Size (AC)	Sale Price / SF	Sale Date
25	42 Gun Club Road, Mitchell	\$299,000	3	2.5	1974	2,706	1-Story SFH with Attached Garage and Pole Barn	1.43	\$110.50	Aug-23

We analyzed 15 Control Area Sales of single-family homes with similar construction and that were not located in close proximity to the solar farm, that sold within a reasonable time frame from the sale date of the Test Area Sale in Group 2. The Control Area Sales for Group 2 are single-family homes located on lots inbetween 0.5 and 2.72-acres in size with three to four bedrooms and two to three baths, consisting of between 2,200 square feet and 3,140 square feet of gross living area, and built between 1964 and 1983. The Control Area Sales also have two-car garage parking and a majority of the Control Area Sales have farm structures such as pole barns, workshops or utility sheds.

The Control Area Sales were adjusted for market conditions using the Federal Housing Finance Agency's House Price Index (HPI), a weighted, repeated-sales index measuring the average price changes in repeat sales or refinancing of the same properties. The result of our analysis for the Spring Mill Solar Farm – Group 2 is presented below.

CohnReznick Paired Sale Analysis Spring Mill Solar Group 2		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Test Area Sale (1)	Adjoining solar farm	\$110.50
Control Area Sales (15)	No: Not adjoining solar farm	\$102.03
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		8.30%

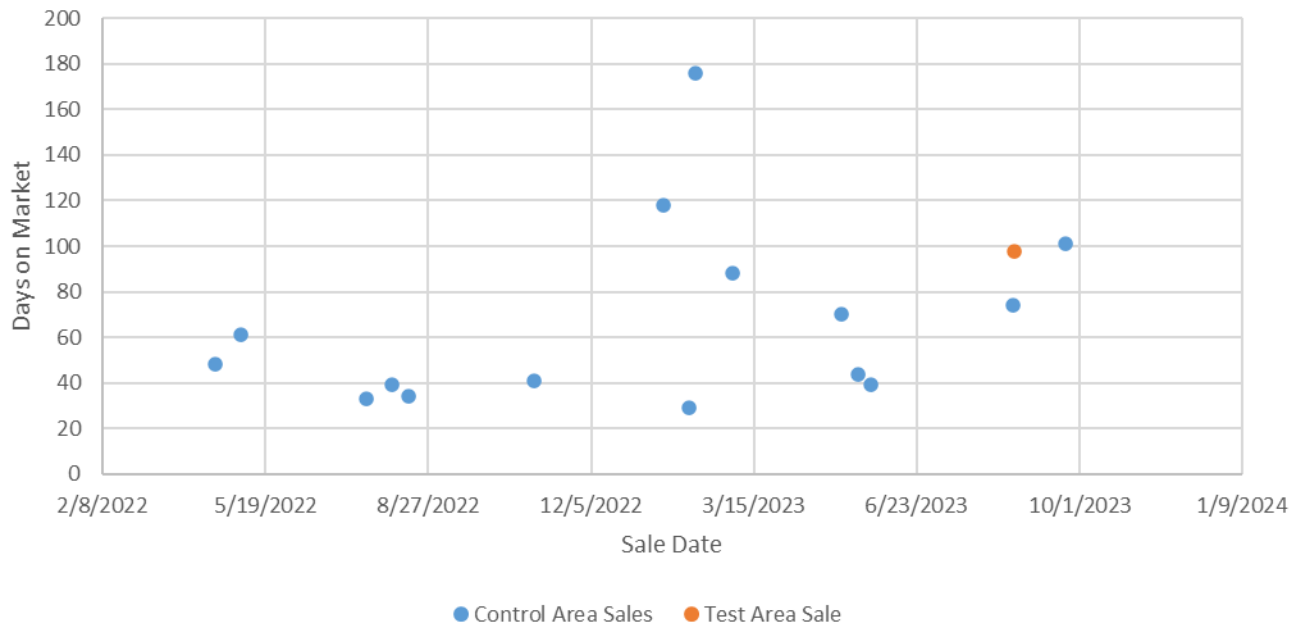
**Noting no negative price differential,** it does not appear that the Spring Mill Solar Farm use impacted the sale of the Test Area Sale, Adjoining Property 10.

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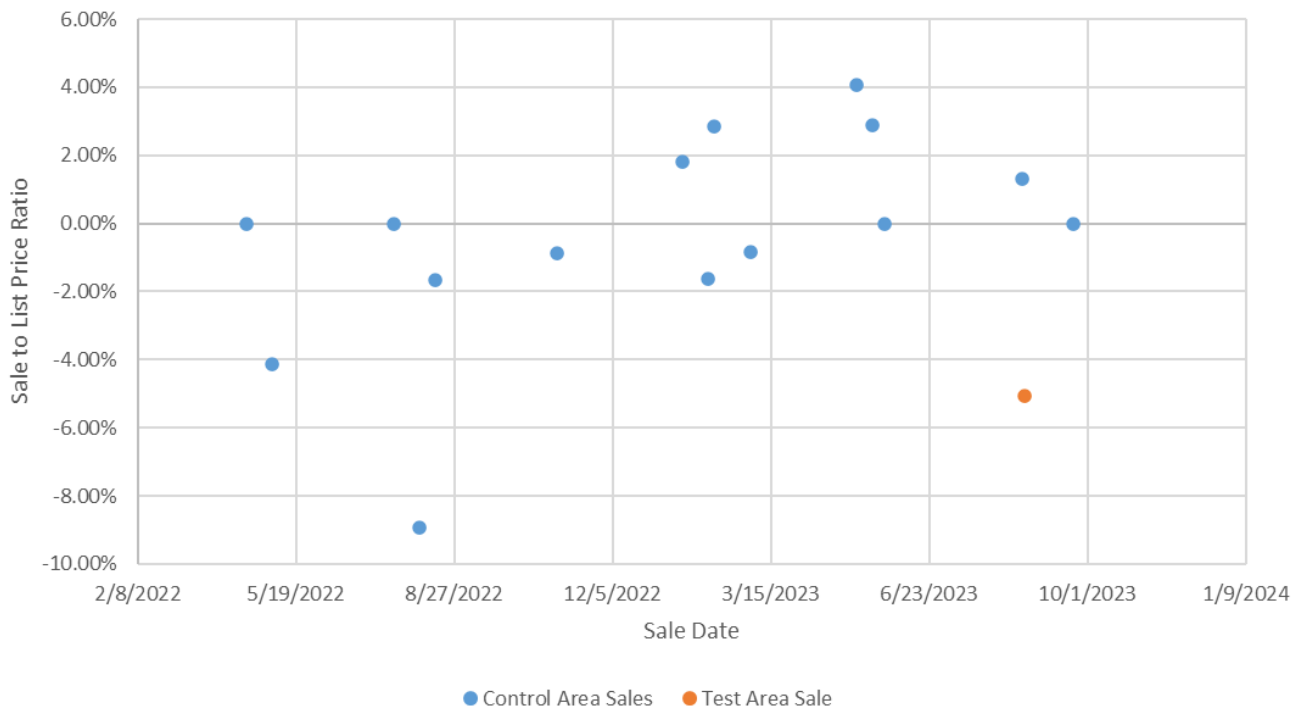
**Noting no negative marketing time differential**, Test Area Sale 2 sold in 98 days, while the Control Area Sales sold between 29 and 176 days. Additionally, the Control Area Sales sold for between 8.94 percent below to 4.05 percent above their listing price while Test Area Sale 2 sold for 5.08 percent less than its' listing price, which is within the range of the Control Area Sales.

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Days on Market for the Test Area Sale and Control Area Sales, Group 2



Sale Price to List Price Ratio for the Test Area Sale and Control Area Sales, Group 2



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### Before & After Analysis – Spring Mill Solar Farm

We note the Test Area Sale in Group 2 of the Spring Mill Solar Farm Study (Adjoining Property 10) as well as seven Control Area Sales have sold at least twice over the past five years. To determine if any of the rates of appreciation for these identified home sales were affected by the proximity to the Spring Mill Solar Farm, we prepared a Repeat-Sales Analysis on the identified adjoining property. First, we calculated the total appreciation between each sale of the same property, the number of months that elapsed between each sale, and determined the monthly appreciation rate. Then, we compared extracted appreciation rates reflected in the Federal Housing Finance Agency (FHFA) Home Price Index for Indiana's 474 Three Digit Zip Code, where Adjoining Property 10 is located, over the same period. The index for the zip code is measured on a quarterly basis and is presented below.

474 Three Digit Zip Code - Housing Price Index Change (Quarter over Quarter) Not Seasonally Adjusted			
Three-Digit ZIP Code	Year	Quarter	Index (NSA)
474	2017	1	187.17
474	2017	2	188.57
474	2017	3	194.19
474	2017	4	191.52
474	2018	1	198.3
474	2018	2	202.76
474	2018	3	203.27
474	2018	4	204.61
474	2019	1	207.15
474	2019	2	213.58
474	2019	3	216.22
474	2019	4	221.52
474	2020	1	223.34
474	2020	2	225.46
474	2020	3	227.72
474	2020	4	233.87
474	2021	1	239.4
474	2021	2	255.49
474	2021	3	264.07
474	2021	4	271.71
474	2022	1	281.21
474	2022	2	302.74
474	2022	3	305.83
474	2022	4	305.51
474	2023	1	299.43
474	2023	2	315.26

We have presented the full repeat sales analysis on the following page.

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Repeat Sales Analysis - Test Area Sales											474 Three Digit Zip Code - FHFA Housing Price Index Change	
Property ID	Address	Land Area (Acres)	Total Finished Living Area (SF)	Most Recent Sale Date	Most Recent Sale Price	Prior Sale Date	Prior Sale Price	Total Appreciation	Months Elapsed Between Sales	Monthly Appreciation Rate	Months Elapsed Between Sales	Monthly Appreciation Rate
10	42 Gun Club Road	1.43	2,706	8/22/2023	\$299,000	10/30/2018	\$190,000	57.37%	58	0.79%	58	0.75%

Repeat Sales Analysis - Control Area Sales											474 Three Digit Zip Code - FHFA Housing Price Index Change	
Property ID	Address	Land Area (Acres)	Total Finished Living Area (SF)	Most Recent Sale Date	Most Recent Sale Price	Prior Sale Date	Prior Sale Price	Total Appreciation	Months Elapsed Between Sales	Monthly Appreciation Rate	Months Elapsed Between Sales	Monthly Appreciation Rate
1-5	2458 Rabbitsville Road	14.96	2,526	5/25/2020	\$275,000	6/6/2018	\$185,000	48.65%	24	1.69%	24	0.45%
1-7	4338 Williams Road	7.72	2,914	8/19/2021	\$302,000	8/9/2018	\$229,900	31.36%	36	0.75%	36	0.72%
2-2	361 Johnson Lane	1.00	2,666	5/18/2023	\$217,500	6/10/2022	\$209,900	3.62%	11	0.32%	11	0.36%
2-5	309 3rd Street	1.21	2,664	3/2/2023	\$252,000	1/28/2019	\$177,900	41.65%	49	0.71%	49	0.75%
2-10	1803 Linwood Drive	0.59	2,200	8/15/2022	\$304,900	7/11/2019	\$180,000	69.39%	37	1.43%	37	0.94%
2-11	6877 State Road 54W	1.62	2,600	10/31/2022	\$332,500	6/22/2020	\$172,000	93.31%	28	2.36%	28	1.08%
2-13	508 Knoll Drive	1.01	2,778	5/8/2023	\$450,000	10/29/2020	\$350,000	28.57%	30	0.83%	30	0.99%
Median - Control Area Sales		1.21	2,664							0.83%		0.75%

## Conclusion

When compared to the FHFA home price index for the 474-zip code, the median extraction rate for the resale of Adjoining Property 10, that sold twice in the previous five years, exhibited a higher rate of appreciation than the Home Price Index for the 474-zip code. Additionally, the monthly appreciation rate of the Adjoining Property 10 was in line with the median monthly appreciation rate of the Control Area Sales, as depicted by the far-right column in the tables above. As such, we have concluded that there does not appear to be a consistent detrimental impact on properties adjacent to the Spring Mill Solar Farm.

**SOLAR FARM 7: VALPARAISO SOLAR, VALPARAISO, PORTER COUNTY, INDIANA**

**Coordinates:** Latitude 41.301180, Longitude -87.094055

**PINs:** 64-09-07-152-001.000-019 and 64-09-07-152-002.000-019

**Total Land Size:** 27.9 Acres

**Population Density (2022):** 335 per square mile (Porter County)

**Date Project Announced:** March 2012

**Date Project Completed:** December 20, 2012

**Output:** 1 MW AC (1.3 MW DC)

The Valparaiso solar farm was developed by Sustainable Power Group, LLC and became operational in December 2012. The solar facility has ground mounted capacity for 1.0 Megawatts (MW) AC of power. The panels are mounted in a fixed tilt fashion and there are two inverters in this solar farm.

**The Surrounding Area:** The Valparaiso solar farm is located in Union Township, in the northwest portion of Porter County, Indiana. Porter County is located in the very northwest corner of the state of Indiana. The solar farm is approximately 10 miles northwest of the Porter County Regional Airport and approximately six and a half miles northwest of the center of the city of Valparaiso.

**The Immediate Area:** This solar farm is located on the southern side of Indiana Route 130 (Railroad Avenue) in Valparaiso, Porter County, Indiana and is located approximately 35 miles southwest of downtown Chicago.

Adjoining parcels to the solar farm to the east and south are residential homes and to the west and north are agricultural in nature.

The solar farm is lined by a chain link fence that surrounds all of the solar panels. Additionally, there are bushes and trees to the north and west of the solar panels; this vegetation has been in place since before development of the solar farm. Other small trees were planted and spaced out around the perimeter of the solar farm after development. From our inspection, the solar panels cannot be seen from Indiana State Route 130 from the north, nor on N 475 W Road to the east as this is a raised roadway. The adjacent properties to the east of the solar panels have full view of the panels from the backyards of the homes.



**Real Estate Tax Information:** Prior to development of the solar farm, in 2011, the original parent parcel contained a home, a homesite, excess land, and agricultural land. In 2012, Valparaiso Solar, LLC bought the entire property to develop the solar farm on. Subsequently when Valparaiso Solar, LLC sold the project to PLH, LLC, they split the parcels so that the home and homesite were one parcel of 3.25 acres and the remaining 24.65 acres were the solar panel site. After development of the solar farm development, in 2015, total real estate taxes for both parcels had increased to approximately \$2,587, a 25 percent increase in tax revenue for the site.

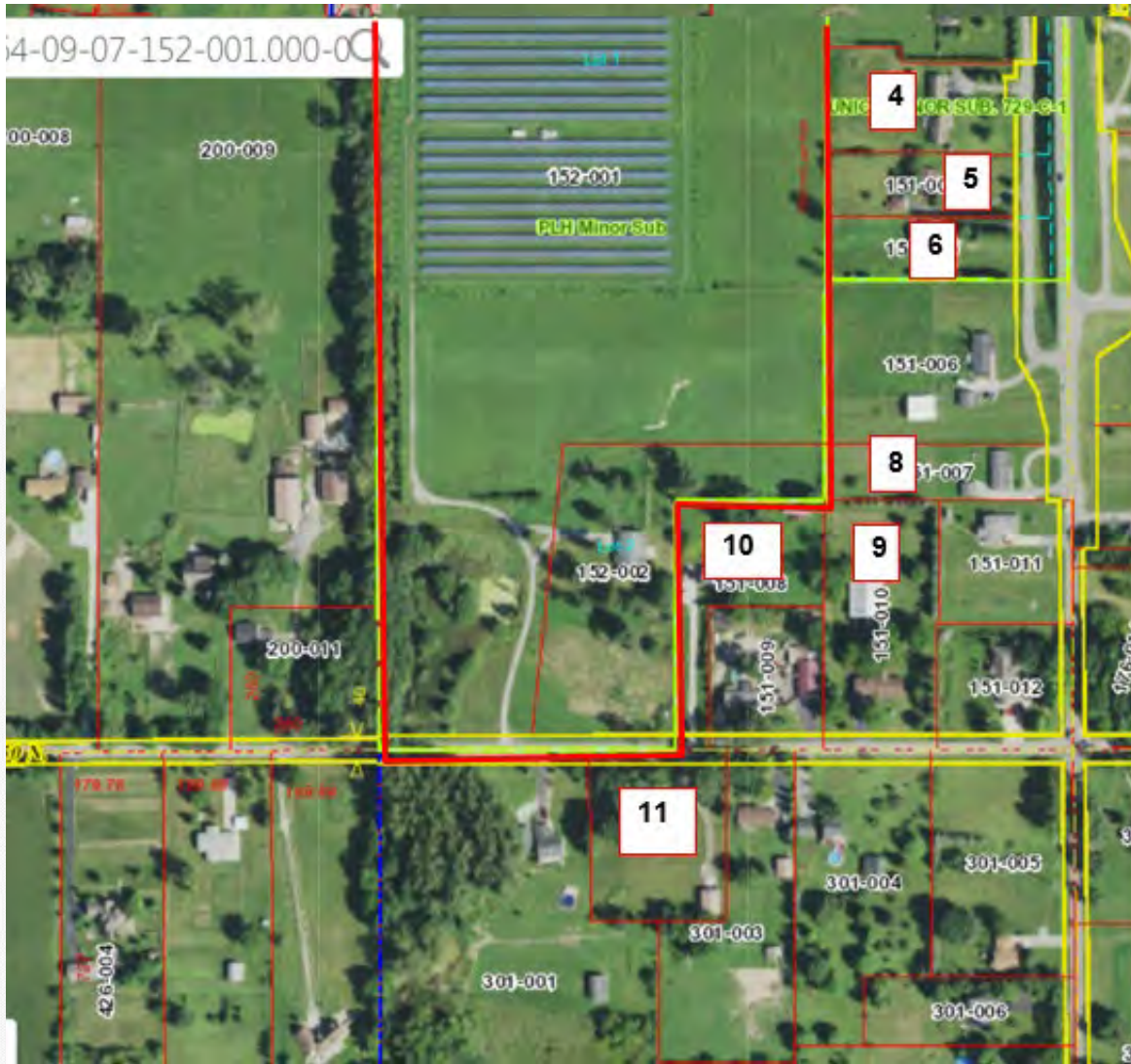
PIN	Acres	2011 Taxes Paid	2015 Taxes Paid	Tax Increase	2011 Assessed Value	2015 Assessed Value	Value Increase
<b>Porter County, IN</b>							
64-09-07-151-001.000-019 (parent parcel)		\$ 2,072			\$ 203,800		
64-09-07-152-001.000-019 (split parcel)	24.65		\$ 2,587			\$ 156,800	
64-09-07-152-002.000-019 (split parcel)	3.25		\$ 1,741			\$ 187,900	
<b>TOTAL</b>	<b>27.90</b>	<b>\$ 2,072</b>	<b>\$ 2,587</b>	<b>25%</b>	<b>\$ 203,800</b>	<b>\$ 344,700</b>	<b>69%</b>

The maps on the following pages display the parcels within the solar farm is located (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.



Valparaiso Solar Farm - Adjoining Properties

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### Valparaiso Solar Farm - Adjoining Properties

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## PAIRED SALES ANALYSIS

Adjoining Properties 10 and 14 (Test Area Sales) were each considered for a paired sales analysis. Both were analyzed as single-family home uses.

### Group 1

For Adjoining Property 10 (Group 1), the residential home is approximately 514 feet from the closest solar panel. The following table outlines the other important characteristics of Adjoining Property 10.

Valparaiso Solar Test Area Sale Group 1									
Adj. Property #	Address	Sale Price	Site Size (AC)	Beds	Baths	Year Built	Square Feet	Price PSF	Sale Date
10	489 W 450 N, Valparaiso, IN	\$105,000	1.45	3	2	1993	1,274	\$ 82.42	Jul-15

We analyzed five Control Area Sales that sold within a reasonable time frame from the sale date of Adjoining Property 10. All Control Area Sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

The result of our analyses for Group 1 is presented below.

CohnReznick Paired Sale Analysis Valparaiso Solar Group 1		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Test Area Sales (1)	Adjoining solar farm	\$82.42
Control Area Sales (5)	No: Not adjoining solar farm	\$79.95
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		3.09%

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## Group 2

For Adjoining Property 14 (Group 2), the residential home is approximately 657 feet from the closest solar panel. This home is not directly adjacent to the solar site, there is one other residential property separating this home from the solar panels, that contains multiple buildings, and there is a line of mature trees that naturally buffers the view to the panels at the eastern edge of that neighboring property. The following table outlines the other important characteristics of Adjoining Property 14.

Valparaiso Solar Test Area Sale Group 2									
Adj. Property #	Address	Sale Price	Site Size (AC)	Beds	Baths	Year Built	Square Feet	Price PSF	Sale Date
14	505 W 450 N, Valparaiso, IN	\$120,000	1.49	3.00	2.00	1971	1,932	\$62.11	Apr-17

In Group 2, we analyzed five Control Area Sales that sold within a reasonable time frame from the sale date of Adjoining Property 14. All Control Area Sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

The result of our analyses for Group 2 is presented below.

CohnReznick Paired Sale Analysis Valparaiso Solar Group 2		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Test Area Sales (1)	Adjoining solar farm	\$62.11
Control Area Sales (5)	No: Not adjoining solar farm	\$64.07
Difference between Unit Price of Test Area Sale and Adjusted Median Unit Price of Control Area Sales		-3.06%

**Noting the relatively small price differential,** with one matched pair reflecting a unit sale price of 3 percent higher for the adjacent Test Area Sale and the other matched pair reflecting a 3 percent lower unit sale price, it does not appear that the Valparaiso Solar farm negatively impacted the sales prices of the Adjoining Properties studied in any way.

**SOLAR FARM 8: IMPA FRANKTON SOLAR FARM, MADISON COUNTY, INDIANA****Location:** Frankton, Madison County, Indiana**Coordinates:** Latitude 40.125701; Longitude -85.4626.88**PIN:** 48-08-06-500-012.001-020**Total Land Size:** 13 acres**Population Density (2022):** 291 people per square mile (Madison County)**Date Project Announced:** November 2013**Date Project Completed:** June 2014**Output:** 1.0 MW AC (1.426 MW DC)

IMPA Frankton Solar Farm is located on the west side of South Lafayette Street, in the Town of Frankton. The solar farm was built in 2014 in joint effort by Inovateus Solar and Indiana Municipal Power Agency (IMPA). This solar farm has the capacity for 1 MW AC and its expected annual output is 1,426 MWh (megawatt hours). The solar farm is separated off from the adjacent properties by a 6 foot fence that surrounds the entirety of the solar panels. From our inspection of the site, we noted that the driveway to access the panels slopes downward and allows some views of the site.

**The Surrounding Area:** The IMPA Frankton solar farm is located in Lafayette Township, in the central portion of Madison County, Indiana. The solar farm is approximately 50 miles northeast of the center of Indianapolis and 65 miles northeast of the Indianapolis International Airport.

**The Immediate Area:**

The solar installation is relatively centrally located in an undeveloped pocket of the town of Frankton, on the western side of South Lafayette Street. Adjoining parcels to the west include park land featuring baseball fields. Land further to the west is agricultural in nature, actively farmed primarily with row crops. Adjoining parcels to the north are residential with large estate homes. Adjoining the solar farm to the southeast is a single-family home identified in our analysis as Adjoining Property 7, and a baseball field. More farmland is directly south of the solar site. The solar site is adjoining a number of homes located east of the panels, along Lafayette Street. Mature trees at the rear of residential properties act as vegetative buffers.

Across Lafayette Street, to the east, are single-family residential homes forming the southeast quadrant of homes in Frankton.

All of the adjacent land parcels to the solar farm are used for agricultural, residential or recreational purposes.

The solar farm is surrounded by a chain link fence that contains all the solar panels. Additionally, vegetative buffers along sides facing residential properties were planted as part of the solar farm development.

**Real Estate Tax Information:** Prior to development of the solar farm in 2014, the original owner held one parcel of 15.667 acres with a home, pole barn and a utility shed, and no personal property was assessed on this parcel. In 2014 the parcel was split into two parcels and 13 acres was sold to IMPA for development of the solar farm. The owner of the parent parcel of 15.667 acres paid real estate taxes of \$1,799 annually, prior to the split. After development of the solar farm, real estate taxes for both parcels, plus personal property tax revenue generated from the solar parcel, caused an increase \$8,275, or a 360 percent increase in tax revenue for the entire site.

PIN	Acres	2013 Taxes Paid	2017 Taxes Paid	Tax Increase	2013 Assessed Value	2017 Assessed Value	Value Increase
<b>Madison County, IN</b>							
48-08-06-500-012.000-020 (parent)	15.667 (2013)	\$ 1,799	\$ 1,402		\$ 138,700	\$ 127,000	
Personal Property		\$ -	\$ -		\$ -	\$ -	
48-08-06-500-012.001-020 (2014 solar parcel split)	13.00 (2017)	\$ -	\$ 4,063		\$ -	\$ 137,400	
Personal Property		\$ -	\$ 2,810		\$ -	\$ 440,380	
<b>TOTAL</b>	<b>0.00</b>	<b>\$ 1,799</b>	<b>\$ 8,275</b>	<b>360%</b>	<b>\$ 138,700</b>	<b>\$ 704,780</b>	<b>408%</b>

The map below displays the solar farm parcel (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.



IMPA Frankton Solar Farm - Adjoining Properties

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## PAIRED SALES ANALYSIS

We have considered a paired sales analysis with regards to the IMPA Frankton solar farm. The analysis compares sales of Adjoining Properties to the solar farm after the completion of the solar farm site (Test Area Sales) to similar properties not proximate to the solar farm (Control Area Sales). We utilized this type of paired sale analysis for both Groups of Adjoining Properties under study.

### Group 1

In Group 1, we identified and analyzed six Control Area Sales that were comparable to the Test Area Sale in location, size, and use that were not located in close proximity to the solar farm. We excluded sales that were bank-owned, or otherwise non arms'-length transactions. Adjoining Property 2 was manufactured single-family home use. The property line of the Test Area Sale is 83 feet to the nearest solar panel and the improvements are 145 feet to the nearest solar panel.

IMPA Frankton Solar Farm Test Area Sale Group 1									
Adj. Property #	Address	Sale Price	Site Size (AC)	Beds	Baths	Year Built	Home Size (SF)	Sale Date	Price PSF
2	607 S. Lafayette St Frankton, IN	\$41,900	0.37	2	2	1991	1,466	Jun-15	\$28.58

The Control Area Sales that are included in this analysis that sold within a reasonable time frame from the sale date of the Test Area Sale (Adjoining Property 2) and are similar to the Test Area Sale in physical characteristics.

Control Area Sales in Group 1 were adjusted for market conditions using a regression analysis to identify the appropriate monthly market condition adjustment. The results of our study are presented below.

CohnReznick Paired Sale Analysis IMPA Frankton Solar Farm Group 1		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price per SF
Test Area Sale (1)	Adjoining Solar Farm	\$28.58
Control Area Sales (6)	No: Not adjoining solar farm	\$28.42
Difference between Unit Price of Test Area Sales and Adjusted Median Unit Price of Control Area Sales		0.56%

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## Group 2

In Group 2, we identified and analyzed five Control Area Sales that were comparable to the Test Area Sale (Adjoining Property 7) in location, size, and use that were not located in close proximity to the solar farm. We excluded sales that were bank-owned, or otherwise non arms'-length transactions. Adjoining Property 7 was analyzed as a single-family home use. The property line of the Test Area Sale is 208 feet to the nearest solar panel and the improvements are 414 feet to the nearest solar panel.

IMPA Frankton Solar Farm Test Area Sale Group 2									
Adj. Property #	Address	Sale Price	Site Size (AC)	Beds	Baths	Year Built	Home Size (SF)	Sale Date	Price PSF
7	713 S. Lafayette St Frankton, IN	\$131,000	3.04	4	2	2003	2,500	Oct-16	\$52.40

The Control Area Sales that are included in this analysis that sold within a reasonable time frame from the sale date of the Test Area Sale and are similar to the Test Area Sale in physical characteristics.

Control Area Sales in Group 2 were adjusted for market conditions using a regression analysis to identify the appropriate monthly market condition adjustment. The results of our study are presented below.

CohnReznick Paired Sale Analysis IMPA Frankton Solar Farm Group 2		
No. of Sales	Potentially Impacted by Solar Farm	Adjusted Median Price per SF
Test Area Sale (1)	Adjoining Solar Farm	\$52.40
Control Area Sales (5)	No: Not adjoining solar farm	\$51.47
Difference between Unit Price of Test Area Sales and Adjusted Median Unit Price of Control Area Sales		1.81%

**Noting the relatively small price differential**, in which the Test Area Sales were higher than the median for the Control Areas Sales, in both Groups 1 and 2, it does not appear that the IMPA Frankton solar farm had any negative impact on adjoining property values.

### TECHNIQUE 3: MARKET COMMENTARY

Additionally, we have contacted market participants such as appraisers, brokers, and developers familiar with property values around solar farms. Between 2017 and 2024, we have contacted over 75 assessors and other market participants. These market participants have reported no evidence of reduced property values due to vicinity to solar farm uses. Commentary from our conversations with these market participants is recorded below.

In Otter Creek Township, in LaSalle County, Illinois, we spoke with Viki Crouch, the Township Assessor, who she said that there has been no impact on property values due to their proximity to the Grand Ridge Solar Farm.

We spoke with Ken Crowley, Rockford Township Assessor in Winnebago County, Illinois, who stated that he has seen no impact on property values in his township as an effect of proximity to the Rockford Solar Farm.

We spoke with James Weisiger, the Champaign Township Assessor in Champaign County, where the University of Illinois Solar Farm is located, and he noted there appears to have been no impact on property values as a result of proximity to the solar farm.

Cindi Lotz of Fayette County, Illinois did indicate that the Dressor Plains Solar project has not had any impact whatsoever on adjacent property values.

Angie Dieterman, the Chief County Assessment Officer in Stephenson County, Illinois, where nine solar farms have been constructed since 2020, stated that there has been no impact on property values due to their proximity to any of the solar farms.

Cami Grossenbacher, Stephenson County, Illinois, Deputy Assessor, stated that there has been no impact on property values due to their proximity to the 2662 Freeport Solar CSG project.

We spoke with Dorene Greiwe, Decatur County Indiana Assessor, and she stated that solar farms have only been in the county a couple of years, but she has seen no impact on land or property prices due to proximity to this solar farm.

Connie Gardner, First Deputy Assessor for Madison County Indiana, stated that there are three solar farms in her county, and she has seen no impact on land or property prices due to proximity to these solar farms.

We spoke with Tara Shaver, Director of Administration for Marion County, Indiana Assessor/Certified Assessor, and she stated that she has seen no impact on land or property prices due to proximity to solar farms.

We interviewed Missy Tetrick, a Commercial Valuation Analyst for the Marion County Indiana Assessor. She mentioned the Dominion Indy Solar III sites and stated that she saw no impact on land or property prices from proximity to this solar farm.

We spoke with George Caster, Randolph County Assessor, who stated that there has been no impact on property values due to their proximity to the Riverstart Solar project. Mr. Caster also noted that the community sees the solar farm as a positive presence.

Lisa Ruhlen, Real Estate Clerk in the Hardin County, Ohio Auditor's office reported that as of first quarter 2022, there have been no complaints or petitions to lower assessed values on homes near the Hardin Solar farm. Primarily because the solar facility went into operation in 2021 and there has not been a tri-annual reassessment



of the county yet. However, in the northern part of the county, where solar facilities have been in operation longer, there have still been no complaints about property value impacts.

Bill Nichols, Chief Appraiser with the Trumbull County Auditor in Ohio, stated that he has seen no effect on property values in properties near a solar farm and no one has come in to complain to the Auditor's office about an impact on their property value.

Beth Fritz, the Valuation Specialist in the Wood County, Ohio Auditor's office has seen no effect or impact on residential, commercial, or agricultural property values on any properties with proximity to a solar farm.

Jarra Underwood, Wayne County Auditor in Ohio reported that she has seen no impact on property values due to their location near a solar farm. There is one solar farm in the county near residential properties and while it is not a highly sought after location, Underwood has still not seen an effect on those property values due to the nearby solar farm.

Scott Tennessen, Assessor for the Town of Two Rivers, Wisconsin, where the Point Beach Solar and Two Creeks Solar projects are located indicated that there have been no sales near the farms since they were built. Mr. Tennessen stated that there has been no change to how properties are assessed, and no complaints have been heard from the community regarding the solar farm.

Amy Mercer, Assessor for the City of Fitchburg, Wisconsin reported that there have not been any new sales that occurred near the 20MW O'Brien Solar Project to help determine if the solar project has impacted sales. However, she stated that several single-family home developments and commercial projects in the planning process prior to the development of the solar fields are still underway without issue. Ms. Mercer reported that they have not modified how homes next to solar fields are assessed and that she lets the sales indicate the assessment changes. She reported that she has not heard any concerns regarding the O'Brien Solar Farm and that a new construction single-family home subdivision across Lacy Road has had very strong sales. Ms. Mercer stated that no property owners have requested a reduction in assessed value for being adjacent a solar field and none have been granted. Overall, she said she is not aware of any issues or complaints in the community regarding the solar farm.

After speaking to Daniel Whittle, the assessor for Pulaski County, Missouri where the 2.8 MW Waynesville Solar Farm is located. Mr. Whittle reported that in his experience there have been no complaints from property owners who filed appeals for believing they should be given a lower assessment for being located close to the solar farm. Additionally, property assessments are not discounted for being located close to the solar farm. And sale prices are not lower for being close to the solar farm.

After speaking to Sajadah N., the administrator of finance, of the assessor's office in Jackson County, Missouri regarding the 2.8 MW Waynesville Solar Farm, it was found that property values have not been affected by the solar farm and they do not discount property values in Jackson County for being near the solar farm.

Cynthia Wellbrock, the County Assessor in Stanton County where the largest solar farm in Kansas is located, indicated that the Johnson Corner Solar Farm (20.0 MW) has had no impact on property values in the surrounding area. She also noted the presence of the solar farm has not led to any appeals of assessed property values.

Ted Droeste, assessor of Delta Township, Michigan has the Delta Solar Power facility in his district that was completed in 2018. He indicated that he has been actively tracking sales of properties surrounding the solar facility and stated that properties have sold fast, at market or above market and he had no evidence of declining value. Mr. Droeste stated that they have not adjusted assessed values for properties surrounding the solar panels.

A Clark County, Kentucky Property Valuation Administrator, Jason Neely, noted there have been no complaints regarding East Kentucky Power Cooperative, Inc.'s Cooperative Solar One project installed in November 2017 located in the county, which has a capacity to generate 8.5 MW of electricity. Additionally, Neely stated he has not seen any evidence of lowered property values in the area and no reduction in assessed property values has been made due to proximity to the solar farm.

A Grant County, Kentucky Assessor stated that they have not seen a reduction in assessed property values or market values for adjacency to solar farms.

A McNairy County, Tennessee Assessor stated that they have not applied reductions to assessed value for adjacency to solar farms.

Christy Wingate, a real estate broker with Parker Real Estate Group, noted in her experience, the presence of a solar farm is neither an attraction nor a deterrent for nearby home buyers.

A Miami Dade County, Florida Assessor stated that they do not reduce assessed property values for adjacency to Solar Farms.

We spoke with Jim Brown, an appraiser for Scotland County, North Carolina, who stated that he has seen no effect on property values due to proximity to a solar farm.

Kathy Renn, a property Valuation Manager for Vance County, North Carolina, stated that she has not noticed any effect on property values due to proximity to a solar farm.

Larry Newton, a Tax Assessor for Anson County, North Carolina, stated that there are six solar farms in the county ranging from 20 to 40 acres and he has not seen any evidence that solar farms have had any effect on property values due to proximity to a solar farm.

We spoke with Patrice Stewart, a Tax Administrator for Pasquotank County, North Carolina, and she has seen no effect on land or residential property values due to proximity to the solar farms in Pasquotank County.

We spoke with the selling broker of the Adjoining Property for Elm City Solar, in North Carolina, Selby Brewer, who said the solar farm did not impact the buyer's motivation.

We spoke with Amy Carr, Commissioner of Revenue in Southampton County, Virginia, who stated that most of the solar farms are in rural areas, but she has not seen any effect or made any adjustments on property values. They have evaluated the solar farmland considering a more intense use, which increased the assessed value.

The Interim Assessor for the town of Whitestown in Oneida County, New York, Frank Donato, stated that he has seen no impact on property values of properties nearby solar farms.



Steve Lehr at the Department of Assessment for Tompkins County, New York, mentioned that the appraisal staff has made no adjustments regarding assessed values of properties surrounding solar farms. Marketing times for properties have also stayed consistent. Lehr noted that a few of the solar farms in Tompkins County are on land owned by colleges and universities and a few are in rural areas.

At this point in time, Al Fiorille, Senior Valuation Specialist in the Tompkins County Assessment department in New York, reported that he cannot measure any negativity from the solar farms and arrays that have been installed within the county.

Mason Hass, the Riverhead Assessor in Suffolk County, on Long Island, New York stated that the solar farms in his town are in industrial zoned areas, and he has not seen any impact on adjacent properties.

In the Assessor's office in the town of Seneca, Ontario County, New York, Shana Jo Hamilton stated that she has seen no impact on property values of properties adjacent to solar farms.

Michael Zazzara, Assessor of the City of Rochester in Monroe County, New York commented that the City has a couple of solar farms, and they have seen no impact on nearby property values and have received no complaints from property owners.

While there are one or two homes nearby to existing solar farms in the town of Lisbon in St. Lawrence County, New York, Assessor Stephen Teele has not seen any impact on property values in his town. The solar farms in the area are in rural or agricultural areas in and around Lisbon.

The Assessor for the Village of Whitehall in Washington County, New York, Bruce Caza, noted that there are solar farms located in both rural and residential areas in the village and he has seen no impact on adjacent properties, including any concerns related to glare from solar panels.

Laurie Lambertson, the Town Assessor for Bethlehem, in Albany County, New York noted that the solar farms in her area are tucked away in rural or industrial areas. Lambertson has seen no impact on property values in properties adjacent to solar farms.

Candace Rindahl of ReMax Results, a real estate broker with 16 years of experience in the North Branch, Minnesota area, said that she has been in most of the homes surrounding the North Star Solar Farm and personally sold two of them. She reported that the neighboring homes sold at market rates comparable to other homes in the area not influenced by the solar farm, and they sold within 45 days of offering, at the end of 2017, which was in line with the market.

Dan Squires, Chisago County Tax Assessor, confirmed that the Chisago County Assessor's Office completed their own study on property values adjacent to and in close vicinity to the solar farm from January 2016 to October 2017. From the study, the assessor determined the residential homes adjacent to the North Star Solar Farm were in-line with the market and were appreciating at the same rate as the market.<sup>18</sup>

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<sup>18</sup> Chisago County Press: County Board Real Estate Update Shows No "Solar Effects" (11/03/2017)

## SOLAR FARM FACTORS ON HARMONY OF USE

**Zoning changes and conditional use permits often require that the proposed use is compatible with surrounding uses.**

The following section analyzes specific physical characteristics of solar farms and is based on research and CohnReznick's personal solar farm site visits and indicate that solar farms are generally harmonious with surrounding property and compliant with most zoning standards.

**Appearance:** Most solar panels have a similar appearance to a greenhouse or single-story residence can range from 8 to 20 feet but are usually not more than 15 feet high. As previously mentioned, developers generally surround a solar farm with a fence and often leave existing perimeter foliage, which minimizes the visibility of the solar farm. The physical characteristics of solar farms are compatible with adjoining agricultural and residential uses.

**Sound:** Solar panels in general are effectively silent and sound levels are minimal, like ambient sound. There are limited sound-emitting pieces of equipment on-site, which only produce a quiet hum (e.g., substation). However, these sources are not typically heard outside the solar farm perimeter fence.

**Odor:** Solar panels do not produce any byproduct or odor.

**Greenhouse Gas (GHG) Emissions:** Much of the GHG produced in the United States is linked to the combustion of fossil fuels, such as coal, natural gas, and petroleum, for energy use. Generating renewable energy from operating solar panels for energy use does not have significant GHG emissions, promoting cleaner air and reducing carbon dioxide (CO<sub>2</sub>) emissions to fight climate change.

**Traffic:** The solar farm requires minimal daily onsite monitoring by operational employees and thus minimal operational traffic.

**Hazardous Material:** Modern solar panel arrays are constructed to U.S. government standards. Testing shows that modern solar modules are both safe to dispose of in landfills and are also safe in worst case conditions of abandonment or damage in a disaster.<sup>19</sup> Reuse or recycling of materials would be prioritized over disposal. Recycling is an area of significant focus in the solar industry, and programs for both batteries and solar panels are advancing every year. While the exact method of recycling may not be known yet as it is dependent on specific design and manufacturer protocol, the equipment is designed with recyclability of its components in mind, and it is likely that solar panel and battery energy storage recycling and reuse programs will only improve in 25 years' time.

**Agrivoltaics:** The land underlying solar farms can serve multiple uses, increasing land-use efficiency, such as growing native plants beneath solar panels or grazing sheep amongst rows of solar panels. Agrivoltaics can further be defined as a farming method that aims to maximize land use by pairing solar panels with cropland,

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<sup>19</sup> Virginia Solar Initiative - Weldon Cooper Center for Public Service – University of Virginia  
(<https://solar.coopercenter.org/taxonomy/term/5311>)



thus minimizing competition between energy production and food.<sup>20</sup> Scientists from the Department of Energy's Argonne National Laboratory in Illinois and the National Renewable Energy Laboratory in Colorado conducted tests on two different solar installations in Minnesota that were built on 76 acres of farmland. The land beneath the solar panels was seeded with numerous species of native grasses and flowers, then allowed to grow for one year. The following years, the two sites were visited four times each summer during peak flower season to track the number and type of insects attracted to the newly planted vegetation. After five years of tracking, the population of native bees increased more than 20 times and adjacent soybean farms experienced an increase in bees and other pollinators. Testing shows that if sited properly, habitat-friendly solar energy can be a feasible way to safeguard insect populations and can improve the pollination services in adjacent agricultural fields.<sup>21</sup>

Examples of homes built adjoining to solar farms are presented on the following pages.

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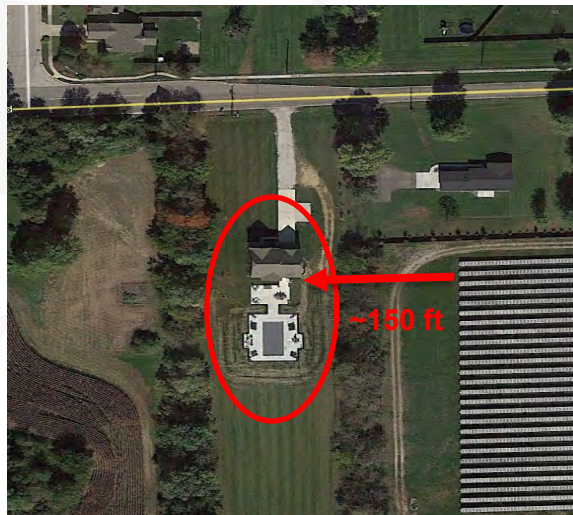
<sup>20</sup> (Bryce, Anthropocene Magazine, 2023) ([Solar panels handle heat better when combined with crops \(anthropocenemagazine.org\)](https://anthropocenemagazine.org/solar-panels-handle-heat-better-when-combined-with-crops/))

<sup>21</sup> (Cornwall, Solar Farms Could Come with a Pollinator Bonus, 2024) ([Solar farms could come with a pollinator bonus \(anthropocenemagazine.org\)](https://anthropocenemagazine.org/solar-farms-could-come-with-a-pollinator-bonus/))

For the Dominion Indy III solar farm, the adjacent land to the west was acquired and subsequently developed with a large estate home – after the solar panels had been in operation for years.



*Dominion Indy III Solar Farm  
September 2014*



*Dominion Indy III Solar Farm  
October 2016*



*Estate home adjacent to Dominion Indy III Solar Farm*

*In ground pool and attached garage (home cost estimated at \$450,000 - October 2015)*

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**Innovative Solar 42 (2017)**  
Cumberland County, NC

Single Family Home Development (1)

- End-user built
- 2,933 SF
- Completed on 3/1/2019
- Cost estimate: \$170,300

Single Family Home Development (2)

- Developer built
- 4 Bedroom
- 3 Bathroom
- 2,401 SF
- Sold 6/18/19 for \$265,900 (\$110.75/sf)



**Innovative Solar 42 (2019)**  
Cumberland County, NC

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***Developer Built Home***

*Sold 6/18/19 for \$265,900 (\$110.75/sf)*

*Cumberland County, NC (adjacent to Innovative 42 solar farm)*

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### Portage Solar Farm located in Indiana

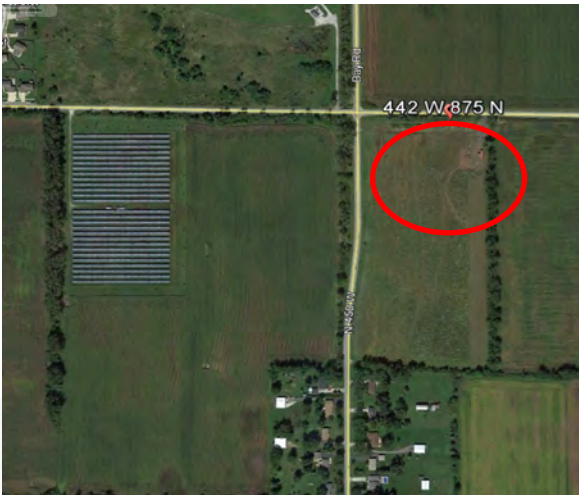


A new 175-home subdivision is currently under construction adjacent the 1.5 MW Portage Solar Farm in Porter County, Indiana. The solar facility was completed in November 2011, and Lennar began construction on the Brookside Subdivision in 2022, with the first homes selling in March 2023. The subdivision is 100 feet from the panels. As of June 2024, there have been 90 closed sales, ranging from \$274,990 to \$454,675, or \$105.00 to \$220.54 PSF, with an average of \$364,990 or \$161.00 PSF. Every house along the boundary with the solar farm sold, with an average price of \$387,664 or \$167.00 PSF, or 3.75% higher. There are 14 active listings, ranging from \$374,990 to \$433,990.

On the next page, we show the same Portage Solar Farm and a newly constructed home to the east of the solar facility, completed in 2016.

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*Portage Solar Farm, IN  
October 2015*



*Portage Solar Farm, IN  
October 2016*



*4,255 square foot estate home under construction, adjacent to Portage Solar Farm located in Indiana*

*On-site pond and attached garage (cost estimated at \$465,000) April 2018*

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The Brighton PV Solar farm became operational in December 2012. Located in Adams County, north of Denver, CO, this solar farm has a capacity of 1.8 MW AC and is located on a triangular parcel of land east of an area of existing custom-built estate homes. A photo of one home (15880 Jackson Street) located directly north of the circled area below is presented to the right.

In December 2012, the 2.55-acre lot encircled in red below (15840 Jackson Street) was purchased for future development of a single-family home. This home was built in 2017, and per the county assessor, the two-story home is 3,725 square feet above ground with 4 bedrooms and 3.5 bathrooms. According to the building permit issued in August 2016, the construction cost was budgeted at \$410,000.



*Brighton PV Solar, Adams County, CO  
June 2016*



*Brighton PV Solar, Adams County, CO  
June 2017*

## SUMMARY OF ADJOINING USES

The table below summarizes each Existing Solar Farm's adjoining uses.

Composition of Surrounding Uses (% of Surrounding Acreage)							
Solar Farm #	Solar Farm	Acreage % of Surrounding Agricultural Uses	Acreage % of Surrounding Residential Uses	Acreage % of Surrounding Industrial Uses	Acreage % of Surrounding Office Uses	Acreage % of Surrounding Other Uses	Avg. Distance from Panels to Improvements (Feet)
1	2662 Freeport Solar CSG	96.30%	3.50%	0.00%	0.00%	0.20%	243
2	Pretzel CSG	73.30%	3.40%	0.00%	0.00%	23.30%	1590
3	IGS Stockton DG CSG	95.40%	2.50%	0.50%	0.00%	1.60%	300
4	Grand Ridge Solar	97.60%	1.40%	0.00%	0.00%	1.00%	553
5	Portage Solar	65.50%	34.50%	0.00%	0.00%	0.00%	991
6	Spring Mill Solar	17.80%	54.30%	0.00%	0.00%	27.90%	481
7	Valparaiso Solar, LLC	81.60%	18.40%	0.00%	0.00%	0.00%	659
8	IMPA Frankton	76.30%	5.70%	0.00%	0.00%	18.00%	236

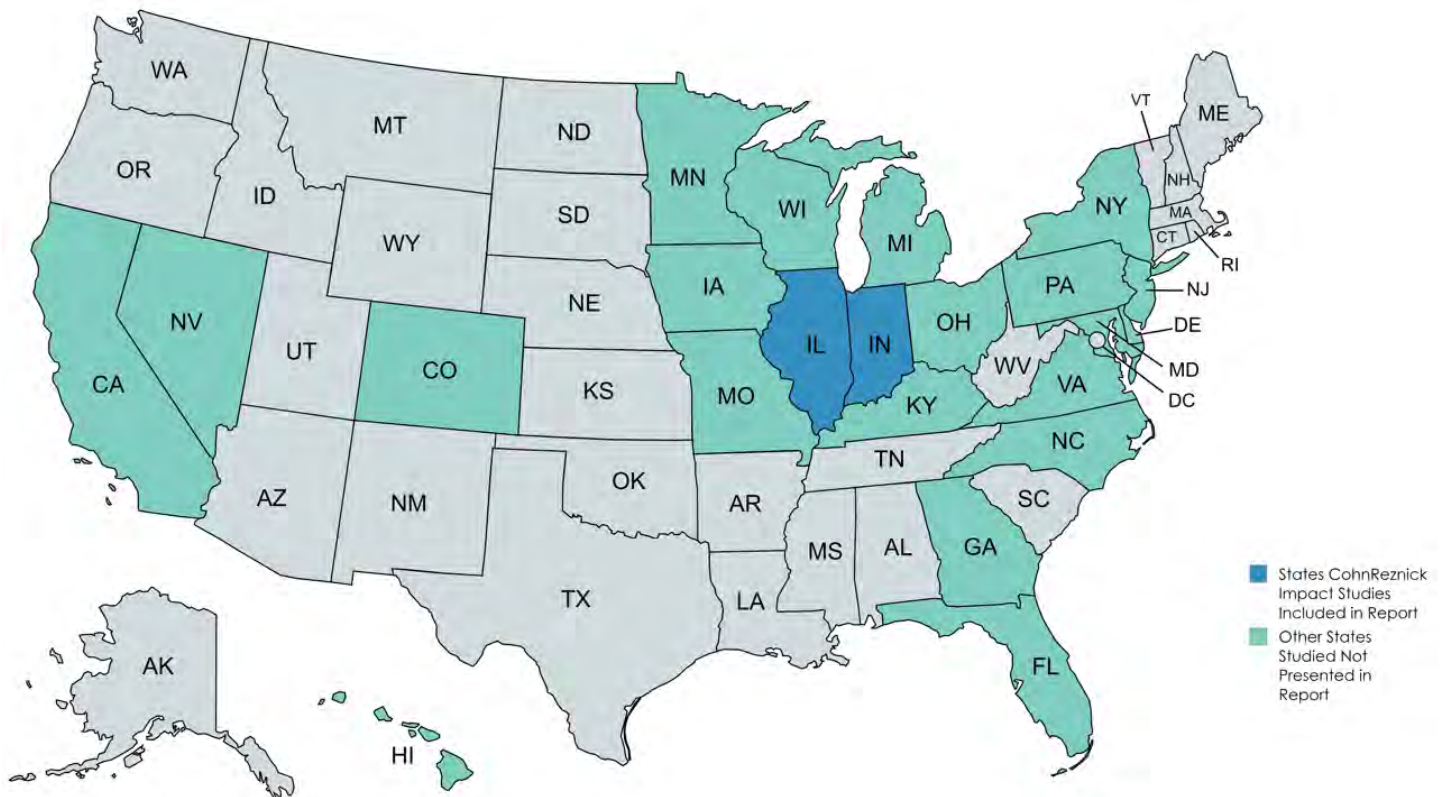
Overall, the vast majority of the surrounding acreage for each comparable solar farm is made up of agricultural land, some of which have homesteads. There are also smaller single-family home sites that adjoin the solar farms analyzed in this report. Generally, these solar farms are sound comparables to Summit Ridge Energy's proposed solar project in terms of adjoining uses, location, and size.

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## SUMMARY AND FINAL CONCLUSIONS

The purpose of this property value impact report is to determine whether the presence of a solar farm has caused a measurable and consistent impact on adjacent property values. Under the identified methodology and scope of work, CohnReznick reviewed published methodology for measuring impact on property values as well as published reports that analyzed the impact of solar farms on property values. These studies found little to no measurable and consistent difference between Test Area Sales and Control Area Sales attributed to the solar farms. A map of all states that CohnReznick has conducted a solar farm impact study and included in this report is presented below.



A summary of the chosen CohnReznick impact studies prepared is presented on the following page.

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CohnReznick Solar Analysis Conclusions								
Solar Farm No.	Solar Farm	Number of Test Area Sales	Number of Control Area Sales	Median Adjoining Property Sale Price per Unit (Test Area Sales)	Median Control Area Sales Price per Unit	Difference (%)	Avg. Feet from Panel to Lot	Avg. Feet from Panel to House
Single-Family Residential								
1	2662 Freeport Solar CSG	2	14	\$77.33	\$76.08	+1.64%	100	230
2	Pretzel CSG	1	5	\$97.37	\$90.96	+7.04%	475	490
3	IGS Stockton DG CSG	1	10	\$50.52	\$52.20	-3.33%	200	250
4	Grand Ridge Solar	1	5	\$79.90	\$74.35	+7.46%	366	479
5	Portage Solar Group 1	1	9	\$8,000	\$7,674	+4.25%	836	1,228
	Portage Solar Group 2	1	7	\$84.35	\$84.27	+0.09%	1,196	1,227
6	Spring Mill Solar Group 1	1	7	\$97.79	\$100.84	-3.03%	55	275
	Spring Mill Solar Group 2	1	15	\$110.50	\$102.03	+8.30%	450	575
7	Valparaiso Solar Group 1	1	5	\$82.42	\$79.95	+3.09%	400	514
	Valparaiso Solar Group 2	1	5	\$62.11	\$64.07	-3.06%	595	657
8	IMPA Frankton Group 1	1	6	\$28.58	\$28.42	+0.56%	83	145
	IMPA Frankton Group 2	1	5	\$52.40	\$51.47	+1.81%	208	414
Median Variance in Sale Prices for Test Area Sales to Control Area Sales						+1.72%		
13 Adjoining Test Area Sales studied and compared to 93 Control Area Sales								

As summarized above, we evaluated 13 property sales adjoining existing solar facilities (Test Area Sales) and 93 Control Area Sales. In addition, we studied a total of one Test Area Sale and seven Control Area Sales in one Before and After analysis. In total, we have studied over 110 sale transactions.

The solar farms analyzed reflected sales of property adjoining an existing solar farm (Test Area Sales) in which the unit sale prices were effectively the same or higher than the comparable Control Area Sales that were not near a solar farm. The conclusions support that there is no negative impact for improved residential homes adjacent to solar, nor agricultural acreage. This was confirmed with market participants interviews, which provided additional insight as to how the market evaluates farmland and single-family homes with views of the solar farm.

It can be concluded that since the Adjoining Property Sales (Test Area Sales) were not adversely affected by their proximity to the solar farm, that properties surrounding other proposed solar farms operating in compliance with all regulatory standards will similarly not be adversely affected, in either the short or long term periods.

Based upon the examination, research, and analyses of the existing solar farm uses, the surrounding areas, and an extensive market database, we have concluded that **no consistent negative impact has occurred to adjacent property values that could be attributed to proximity to the adjacent solar farm**, with regard to unit sale prices or other influential market indicators. Additionally, in our workfile we have retained analyses of additional existing solar farms, each with their own set of matched control sales, which had consistent results, indicating no consistent and measurable impact on adjacent property values. This conclusion has been confirmed by numerous county assessors who have also investigated this use's potential impact on property values.



If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

**CohnReznick LLP**



Andrew R. Lines, MAI, CRE  
Principal  
Certified General Real Estate Appraiser  
Illinois License No. 553.001841  
Expires 9/30/2025  
Indiana License No. CG41500037  
Expires 6/30/2026



Erin C. Bowen, MAI  
Director  
Certified General Real Estate Appraiser  
Arizona License No. 32052  
Expires 12/31/2024  
Oregon License No. C001551  
Expires 6/30/2026

## CERTIFICATION

We certify that, to the best of our knowledge and belief:

1. The statements of fact and data reported are true and correct.
2. The reported analyses, findings, and conclusions in this consulting report are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, findings, and conclusions.
3. We have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
4. We have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. We have no bias with respect to the property that is the subject of this report or the parties involved with this assignment.
6. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value finding, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report.
8. Our analyses, findings, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, which includes the Uniform Standards of Professional Appraisal Practice (USPAP).
9. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
10. Andrew R. Lines, MAI, CRE and Erin C. Bowen, MAI have viewed the exterior of all comparable data referenced in this report in person, via photographs, or aerial imagery.
11. We have not relied on unsupported conclusions relating to characteristics such as race, color, religion, national origin, gender, marital status, familial status, age, and receipt of public assistance income, handicap, or an unsupported conclusion that homogeneity of such characteristics is necessary to maximize value.
12. Joseph Ficenec provided significant appraisal consulting assistance to the persons signing this certification, including data verification, research, and administrative work all under the appropriate supervision.
13. We have experience in reviewing properties similar to the subject and are in compliance with the Competency Rule of USPAP.
14. As of the date of this report, Andrew R. Lines, MAI, CRE and Erin C. Bowen, MAI have completed the continuing education program for Designated Members of the Appraisal Institute.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

**CohnReznick LLP**



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## ASSUMPTIONS AND LIMITING CONDITIONS

*The fact witness services will be subject to the following assumptions and limiting conditions:*

1. No responsibility is assumed for the legal description provided or for matter pertaining to legal or title considerations. Title to the property is assumed to be good and marketable unless otherwise stated. The legal description used in this report is assumed to be correct.
2. The property is evaluated free and clear of any or all liens or encumbrances unless otherwise stated.
3. Responsible ownership and competent management are assumed.
4. Information furnished by others is believed to be true, correct and reliable, but no warranty is given for its accuracy.
5. All engineering studies are assumed to be correct. The plot plans and illustrative material in this report are included only to help the reader visualize the property.
6. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions or for obtaining the engineering studies that may be required to discover them.
7. It is assumed that the property is in full compliance with all applicable federal, state, and local and environmental regulations and laws unless the lack of compliance is stated, described, and considered in the evaluation report.
8. It is assumed that the property conforms to all applicable zoning and use regulations and restrictions unless nonconformity has been identified, described and considered in the evaluation report.
9. It is assumed that all required licenses, certificates of occupancy, consents, and other legislative or administrative authority from any local, state, or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.
10. It is assumed that the use of the land and improvements is confined within the boundaries or property lines of the property described and that there is no encroachment or trespass unless noted in this report.
11. The date of value to which the findings are expressed in this report apply is set forth in the letter of transmittal. The appraisers assume no responsibility for economic or physical factors occurring at some later date which may affect the opinions herein stated.
12. Unless otherwise stated in this report, the existence of hazardous materials, which may or may not be present on the property, was not observed by the appraisers. The appraisers have no knowledge of the existence of such substances on or in the property. The appraisers, however, are not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation, radon gas, lead or lead-based products, toxic waste contaminants, and other potentially hazardous materials may affect the value of the property. The value estimate is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No



responsibility is assumed for such conditions or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if desired.

13. The forecasts, projections, or operating estimates included in this report were utilized to assist in the evaluation process and are based on reasonable estimates of market conditions, anticipated supply and demand, and the state of the economy. Therefore, the projections are subject to changes in future conditions that cannot be accurately predicted by the appraisers, and which could affect the future income or value projections.
14. Fundamental to the appraisal analysis is the assumption that no change in zoning is either proposed or imminent, unless otherwise stipulated. Should a change in zoning status occur from the property's present classification, the appraisers reserve the right to alter or amend the value accordingly.
15. It is assumed that the property does not contain within its confined any unmarked burial grounds which would prevent or hamper the development process.
16. The Americans with Disabilities Act (ADA) became effective on January 26, 1992. We have not made a specific compliance survey and analysis of the property to determine if it is in conformance with the various detailed requirements of the ADA. It is possible that a compliance survey of the property, together with a detailed analysis of the requirements of the ADA, could reveal that the property is not in compliance with one or more of the requirements of the Act. If so, this fact could have a negative effect on the value of the property. Unless otherwise noted in this report, we have not been provided with a compliance survey of the property. Any information regarding compliance surveys or estimates of costs to conform to the requirements of the ADA are provided for information purposes. No responsibility is assumed for the accuracy or completeness of the compliance survey cited in this report, or for the eventual cost to comply with the requirements of the ADA.
17. Any value estimates provided in this report apply to the entire property, and any proration or division of the total into fractional interests will invalidate the value estimate, unless such proration or division of interests has been set forth in this report.
18. Any proposed improvements are assumed to have been completed unless otherwise stipulated; any construction is assumed to conform with the building plans referenced in this report.
19. Unless otherwise noted in the body of this report, this evaluation assumes that the subject does not fall within the areas where mandatory flood insurance is effective.
20. Unless otherwise noted in the body of this report, we have not completed nor are we contracted to have completed an investigation to identify and/or quantify the presence of non-tidal wetland conditions on the subject property.
21. This report should not be used as a basis to determine the structural adequacy/inadequacy of the property described herein, but for evaluation purposes only.
22. It is assumed that the subject structure meets the applicable building codes for its respective jurisdiction. We assume no responsibility/liability for the inclusion/exclusion of any structural component item which may have an impact on value. It is further assumed that the subject property will meet code requirements as they relate to proper soil compaction, grading, and drainage.

23. The appraisers are not engineers, and any references to physical property characteristics in terms of quality, condition, cost, suitability, soil conditions, flood risk, obsolescence, etc., are strictly related to their economic impact on the property. No liability is assumed for any engineering-related issues.

*The evaluation services will be subject to the following limiting conditions:*

1. The findings reported herein are only applicable to the properties studied in conjunction with the Purpose of the Evaluation and the Function of the Evaluation as herein set forth; the evaluation is not to be used for any other purposes or functions.
2. Any allocation of the total value estimated in this report between the land and the improvements applies only to the stated program of utilization. The separate values allocated to the land and buildings must not be used in conjunction with any other appraisal and are not valid if so used.
3. No opinion is expressed as to the value of subsurface oil, gas or mineral rights, if any, and we have assumed that the property is not subject to surface entry for the exploration or removal of such materials, unless otherwise noted in the evaluation.
4. This report has been prepared by CohnReznick under the terms and conditions outlined by the enclosed engagement letter. Therefore, the contents of this report and the use of this report are governed by the client confidentiality rules of the Appraisal Institute. Specifically, this report is not for use by a third party and CohnReznick is not responsible or liable, legally or otherwise, to other parties using this report unless agreed to in writing, in advance, by both CohnReznick and/or the client or third party.
5. Disclosure of the contents of this evaluation report is governed by the by-laws and Regulations of the Appraisal Institute has been prepared to conform with the reporting standards of any concerned government agencies.
6. The forecasts, projections, and/or operating estimates contained herein are based on current market conditions, anticipated short-term supply and demand factors, and a continued stable economy. These forecasts are, therefore, subject to changes with future conditions. This evaluation is based on the condition of local and national economies, purchasing power of money, and financing rates prevailing at the effective date of value.
7. This evaluation shall be considered only in its entirety, and no part of this evaluation shall be utilized separately or out of context. Any separation of the signature pages from the balance of the evaluation report invalidates the conclusions established herein.
8. **Possession of this report, or a copy thereof, does not carry with it the right of publication, nor may it be used for any purposes by anyone other than the client without the prior written consent of the appraisers, and in any event, only with property qualification.**
9. The appraisers, by reason of this study, are not required to give further consultation or testimony or to be in attendance in court with reference to the property in question unless arrangements have been previously made.
10. Neither all nor any part of the contents of this report shall be conveyed to any person or entity, other than the appraiser's client, through advertising, solicitation materials, public relations, news, sales or



other media, without the written consent and approval of the authors, particularly as to evaluation conclusions, the identity of the appraisers or CohnReznick, LLC, or any reference to the Appraisal Institute, or the MAI designation. Further, the appraisers and CohnReznick, LLC assume no obligation, liability, or accountability to any third party. If this report is placed in the hands of anyone but the client, client shall make such party aware of all the assumptions and limiting conditions of the assignment.

11. This evaluation is not intended to be used, and may not be used, on behalf of or in connection with a real estate syndicate or syndicates. A real estate syndicate means a general or limited partnership, joint venture, unincorporated association or similar organization formed for the purpose of, and engaged in, an investment or gain from an interest in real property, including, but not limited to a sale or exchange, trade or development of such real property, on behalf of others, or which is required to be registered with the United States Securities and Exchange commissions or any state regulatory agency which regulates investments made as a public offering. It is agreed that any user of this evaluation who uses it contrary to the prohibitions in this section indemnifies the appraisers and the appraisers' firm and holds them harmless from all claims, including attorney fees, arising from said use.

## ADDENDUM A: APPRAISER QUALIFICATIONS

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## Andrew R. Lines, MAI, CRE

### Principal – Real Estate Valuation Valuation Advisory Services

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Andrew R. Lines, MAI, CRE is a Principal for CohnReznick Advisory's Valuation Advisory Services practice who has been a CohnReznick employee for over twelve years. Andrew has been involved in the real estate business for more than 20 years and has performed valuations on all real estate classes (industrial, commercial, residential, development land). Special-use valuations include affordable housing (as well as market studies), student housing, senior housing, cannabis facilities (indoor/outdoor, processing and dispensaries), landfills, waste transfer stations, golf courses, marinas, hospitals, universities, telecommunications facilities, data centers, self-storage facilities, racetracks, and corridors. Impact Study Reports have also been generated for zoning hearings related to the development of solar facilities, wind powered facilities, landfills, big box retail, waste transfer stations, private mental health clinics, cannabis dispensaries, concert/stadium venues and day care centers. He is also experienced in the valuation of leasehold, leased fee, and partial interests, as well as purchase price allocations (GAAP, IFRS and IRC 1060) for financial reporting.

Valuations have been completed nationwide for a variety of assignments including mortgage financing, litigation, tax appeal, estate gifts, asset management, workouts, and restructuring, as well as valuation for financial reporting including purchase price allocations (ASC 805), impairment studies, and appraisals for investment company guidelines and REIS standards. Andrew has qualified as an expert witness, providing testimony for cases in the states of IL, DC, VA, NY and MD, and for zoning hearings in IL, IN, MI, NY, HI, OH, KY, CO, PA, WI and MO. Andrew has also performed appraisal review assignments for accounting purposes (audit support), asset management, litigation and as an evaluator for a large Midwest regional bank.

Andrew has earned the professional designation of Member of the Appraisal Institute (MAI). He has also qualified for certified general commercial real estate appraiser licenses in AZ, CA, IL, IN, WI, MD, OH, NY, NJ, FL, GA, KY and DC. Temporary licenses have been granted in CT, CO, PA, ID, MS, KS, MT and SC.

#### Education

- Syracuse University: Bachelor of Fine Arts
- MAI Designation (Member of the Appraisal Institute)

#### Professional Affiliations

- Counselors of Real Estate (CRE)
- Chicago Chapter of the Appraisal Institute
- International Real Estate Management (IREM)
- National Council of Housing and Market Analysts (NCHMA)

#### Community Involvement

- Syracuse University Regional Council
- Chicago Friends School

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## Erin C. Bowen, MAI

### Director, Valuation Advisory Services

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Erin Bowen, MAI is a Director with CohnReznick in Valuation Advisory Services. Ms. Bowen is based in Phoenix, Arizona, with presence covering the west coast. Ms. Bowen's work in Commercial Real Estate valuation spans over 12 years.

Ms. Bowen specializes in lodging, cannabis, seniors housing, large scale retail and multifamily conversion properties. Lodging work includes all hotel property types and brand segments including limited, full service and resort properties; additionally, Ms. Bowen has appraised numerous hotel to multifamily conversion properties including market rate and affordable housing. Cannabis work includes dispensaries, cultivation facilities including specialized indoor facilities and greenhouse properties, processing and manufacturing facilities. Senior's housing assignments include assisted living, skilled nursing facilities and rehabilitation centers. Retail work spans power centers, lifestyle centers, outlet centers and malls. She has appraised numerous additional properties including multifamily, office, medical office, industrial, churches, and vacant land.

Ms. Bowen has expertise in appraising properties at all stages of development, including existing as is, proposed, under construction, renovations and conversion to alternate use. Valuations have been completed nationwide for a variety of assignments including mortgage financing, litigation, eminent domain, tax appeal, estate gifts, asset management, as well as valuation for financial reporting including purchase price allocations (ASC 805). Impact Study Reports have also been generated for zoning hearings related to the development of solar facilities and wind powered facilities. Ms. Bowen has qualified as an expert witness and provided testimony for zoning and county commission hearings.

#### Education

- University of California, San Diego: Bachelor of Arts in Psychology and Theater; College Honors

#### Professional Affiliations

- Appraisal Institute, Designated Member

#### Licenses

Certified General Real Estate Appraiser licensed in Oregon, Arizona, California, and Nevada

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## Joe Ficenec

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Joe Ficenec is a consultant in CohnReznick's Valuation Advisory Services practice and is based in the Sacramento office. Joe specializes in Impact Study Reports, which have been conducted for zoning hearings related to the development of solar facilities and wind powered facilities. He also has experience in assisting with the appraisal multifamily, office, industrial, retail, lodging and mixed-use properties for financing and purchase price allocation purposes.

Joe graduated with honors from the University of California, Davis in May 2017 with a major in managerial economics. Prior to joining CohnReznick, Joe worked as a Real Estate Assessor for a county government and as a consultant for a nationwide real estate firm in San Francisco.

### Education

- University of California, Davis – B.S. Managerial Economics

## *EXHIBIT J: Noise Study*



## MAHOMET SOLAR AMBIENT NOISE STUDY

MAHOMET, ILLINOIS

NOISE - AMBIENT SURVEY

RWDI # 2506209

December 31, 2024

### SUBMITTED TO

**Moira Cronin**

Summit Ridge Energy  
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# APPENDICES

Appendix A: Sound Level Meter Calibration Certificates

Appendix B: Measured 1-Minute Sound Levels at Measurement Location



# 1 INTRODUCTION

RWDI was retained by Summit Ridge Energy to conduct an ambient background measurement for the lands adjacent to the proposed Mahomet IL Solar 1, LLC Project (the Project) near Mahomet, Illinois. This report was prepared to present measured background ambient sound levels at adjacent receptors to the proposed project, and follows the methodology specified in the Illinois Pollution Control Board (IPCB) Title 35, Subtitle H (Noise), Chapter I (Pollution Control Board), Part 901 Sound Emission Standards and Limitations for Property Line-Noise Sources (IPCB, 2018b).

Noise impacts from the Mahomet IL Solar 1, LLC Project were previously assessed by RWDI (RWDI, 2024) and sound levels compared IPCB sound level limits. The assessment found that the Project would meet the sound level limits and demonstrated that audibility from the Project was unlikely. This prediction used the conservative assumed ambient background sound levels provided in IPCB Section 910 Appendices A Tables C and D, for a Category 5 location defined as Very Quiet, Sparse Suburban or Rural Area.

Audibility is assessed for the Project using the measured background levels for daytime hours.

# 2 APPLICABLE NOISE REGULATIONS

## 2.1 IPCB Noise Limits

Table 1 lists the various octave band limits for a Class A Land classification from various noise source land uses for both daytime and nighttime hours. Table 1 also shows the calculated overall sound levels in linear and A-weighted sound levels based on the octave band limits.

The Project is classified as a Class C Land use. The bolded limits are the applicable levels for the Project to the adjacent Class A receiver locations. As noted in Section 901.102, the noise emissions should be evaluated at a distance of 25 ft from the property line noise source.

Table 1: Allowable Sound Emitted to Class A Land During Daytime Hours

Noise Source Land Classification	Allowable Octave Band (Hz) Sound Levels (dB)									Overall	
	31.5	63	125	250	500	1000	2000	4000	8000	dB	dBA
Daytime Hours (07:00 - 22:00)											
Class C Land	75	74	69	64	58	52	47	43	40	78	61
Class B Land	72	71	65	57	51	45	39	34	32	75	55
Class A Land	72	71	65	57	51	45	39	34	32	75	55
Nighttime Hours (22:00 - 07:00)											
Class C Land	69	67	62	54	47	41	36	32	32	72	51
Class B Land	63	61	55	47	40	35	30	25	25	66	44
Class A Land	63	61	55	47	40	35	30	25	25	66	44





Section 901.104 of the IPCB limits also specifies daytime and nighttime noise limits for highly impulsive sound. The Project contains no noise sources that are impulsive or highly impulsive, as the inverters and transformers operate in a continuous steady state manner. Therefore, the Project has not been assessed for impulsive noise sources.

## 2.2 Village of Mahomet, Illinois Code of Ordinances

The Village of Mahomet, Illinois Code of Ordinances (VMCO, 2003) has no specific noise limits, instead provides subjective quantification of unwanted noise in Chapter 131.19 (2) Nonvehicular Noise Prohibitions as the following:

No person shall conduct any of the following activities if any activity produces clearly audible sound beyond the boundary line of the property or residential unit on which or in which the activity is conducted:

(2) The operation of power tools or power equipment, except that the tools or equipment may be used between the hours of 7:00 a.m. and 10:00 p.m. for reasonable lengths of time.

The Project noise sources may be considered as power equipment with respect to the VMCO and should be considered for audibility.

## 3 MEASUREMENT APPROACH

### 3.1 Equipment

The measurements used a Bruel and Kjaer Class 1 integrating sound level meter that meets the definitions of ANSI/ASA S1.4-2014 - National Standard Electroacoustics – Sound Level Meters – Part 1, as required in the IPCB Section 900.103 Measurement procedures. The sound level meter is capable of recording overall and octave band filtered sound pressure levels required for the measurement procedure.

The sound level meter was field calibrated before and after the measurement period to ensure accuracy of the measurement. A copy of the unit's calibration records is presented in Appendix A. The meter was set to record overall sound pressure levels on a minute basis for the following metrics:

- Overall sound levels (linear and A-weighted),
- 1/1 octave band levels (Max, min, overall),
- Sound level percentiles (L90, L50, and L10),
- Audio of the measurement.

The microphone of the sound level meter was placed on a tripod at a height of 5 ft (1.5 m), representative of a human listener. Audio data was recorded and reviewed. Invalid data from the recording was excluded from the record. Examples of invalid data was RWDI staff, close proximity sound sources such as bird cawing near the microphone, and honking noises from the highway.

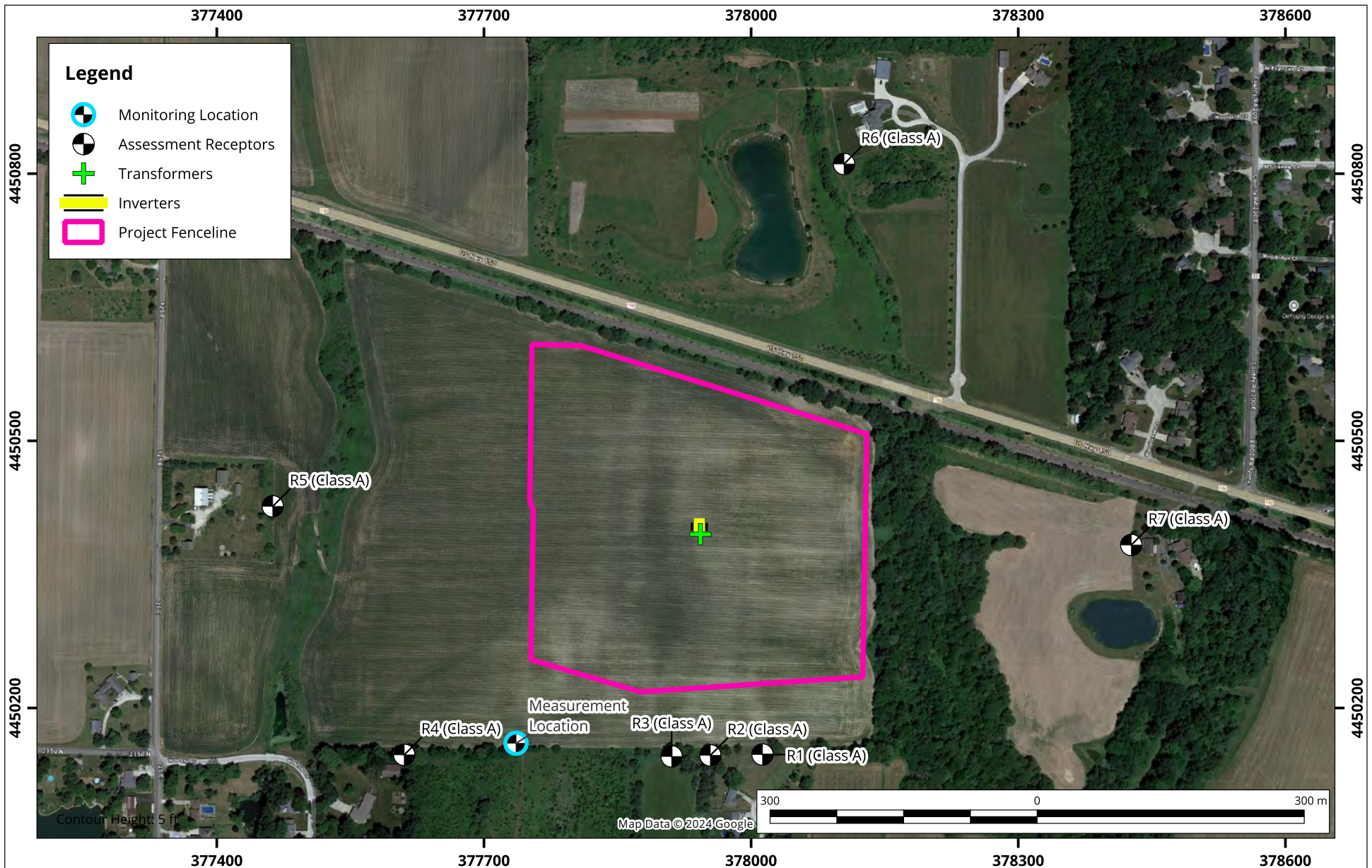
## 3.2 Monitoring Locations

A sound level meter was deployed at a location that represents the dwelling that experiences the least impact from US HWY 150 and would therefore be assumed to be the dwelling with the lowest ambient sound level and would experience the greatest impact, or change relative to ambient, as a result of the Project. Figure 1 shows the photos of the monitor at the time of setup. Figure 2 shows the monitoring location with respect to the receptors considered in the noise impact assessment and the overall Project area. Per the IPCB requirements, the sound level meter was placed 25 ft or greater from the property line.

**Figure 1: Photo of the Monitoring Location**



Map Document: \\2025\2506209\03\WorkItems\20\Environmental\Noise\Analysis\GIS\2023\1212 - Nurmi Solar - 240520 MD\_UPDATE.qbz



## Mahomet IL Solar 1, LLC Background Ambient Monitoring Location

Map Projection: NAD83 / UTM zone 16N  
Mahomet, IL

True North



Project #:2506209

Drawn by: KD Figure: 2

Approx. Scale: 1:6,000

Date Revised: Dec 31, 2024







### 3.3 Monitoring Program

The sound level meter was deployed on October 29<sup>th</sup>, 2024, and set to record for three days and two nights. The location was selected as it is the dwelling furthest from US Highway 150, which was assumed would be the primary source of noise in the area. Further, the sound levels experienced at this location would be considered representative of all the impacted dwellings considered in the noise impact assessment for the Project (RWDI, 2024), as there is a single dominant source which all dwellings receive contributions from, the intervening land is flat with no significant features blocking line of site to the highway, and the monitoring location is set back such that levels will be greater at locations closer to the Highway. It is expected that other dwelling background levels will be greater than or equal to those measured at the monitoring location.

## 4 RESULTS AND DISCUSSION

### 4.1 Summary of Results

The audio review of recording at the monitoring location indicates that the acoustic environment of the area was primarily the traffic noise from US Highway 150. Table 2 shows the measured results for each date period, from October 29 to October 31, 2024. Octave band data and overall sound levels for each period was time weighted for the period. The summary levels are used for comparison to the predicted Project contributions as described in the noise impact assessment. Overall A-weighted sound pressure level time series plots are presented in Appendix B. Any events that were removed from the data set are also identified in the figures in Appendix B and are not included in the summary analysis.

**Table 2: Measurement Results**

Date	1/1 Octave Band (Hz) Sound Levels (dB)									Overall Sound Levels
	31.5Hz	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	dBA
Daytime Hours										
2024-10-29	79	71	62	58	54	48	41	36	35	55
2024-10-30	79	72	63	58	54	48	40	36	36	56
2024-10-31	70	62	56	53	46	42	34	24	24	49
<b>Summary</b>	<b>77</b>	<b>70</b>	<b>61</b>	<b>57</b>	<b>52</b>	<b>47</b>	<b>39</b>	<b>34</b>	<b>33</b>	<b>54</b>
Nighttime Hours										
2024-10-29	74	65	56	50	44	37	33	30	29	47
2024-10-30	67	58	51	45	40	37	35	32	34	44
<b>Summary</b>	<b>72</b>	<b>63</b>	<b>54</b>	<b>48</b>	<b>42</b>	<b>37</b>	<b>34</b>	<b>31</b>	<b>32</b>	<b>46</b>





## 4.2 Comparison to Project Predictions and Potential Audibility

The potential audibility of the Project for daytime and nighttime hours has been assessed using the measured background levels in order to determine whether the Project will be “clearly audible” according to the VMCO ordinance for unwanted noise in Chapter 131.19.

Table 3 shows the comparison of the measured background ambient sound level with the predicted Project sound levels (RWDI, 2024). The greatest change over background sound levels is predicted to be 2 dB in the 200 Hz octave band during daytime hours when the Project will be running at full capacity.

The overall change in sound levels during the daytime and nighttime periods are 0 dB and 1 dB respectively. Changes in overall sound levels less than 3 dB are qualitatively assessed as inaudible (RWDI 2024).

Based on the measured background sound levels, the Project is expected to be inaudible during the daytime and nighttime hours, with US HWY 150 being the dominant noise source at all dwellings.

**Table 3: Comparison of Measured Ambient Sound with the Predicted Worst Case Project Contributions**

Scenario	1/1 Octave Band (Hz) Sound Levels (dB)									Overall Sound Levels
	31.5	63	125	250	500	1000	2000	4000	8000	dBA
Daytime Hours										
Predicted Project Contributions at the Most Impacted Receptor	40	40	35	25	32	30	28	30	0	35.8
Daytime Measured Level	77	70	61	57	52	47	39	34	33	54
Cumulative Sound Level <sup>[1]</sup>	77	70	61	57	53	47	39	36	33	54
Change in Sound Levels	0	0	0	0	1	0	0	2	0	0
Nighttime Hours										
Predicted Project Contributions at the Most Impacted Receptor	40	40	35	25	32	30	28	30	0	35.8
Nighttime Measured Level	72	63	54	48	42	37	34	31	32	46
Cumulative Sound Level <sup>[1]</sup>	72	63	54	48	43	38	35	34	32	47
Change in Sound Levels	0	0	0	0	1	1	1	3	0	1

Note: [1] Cumulative sound level is the logarithmic addition of the Predicted Project contribution and the measured ambient background level.



## 5 CONCLUSIONS AND RECOMMENDATIONS

A three-day, two-night background noise measurement study was conducted at representative locations of dwellings for the Mahomet Solar Project. Measurement data for a single location was analyzed and summarized.

The results support the conclusions from the Project noise study that the Mahomet Solar Project will be inaudible at the receptor locations during the periods when the inverters are operational. Noise contributions from the existing environment, which is Highway 150 will dominate any sounds from the Project. This ambient measurement indicates that the Project location is suitable for the area in terms of compatibility with respect to noise, as no negative impacts (audibility) are expected.



## 6 STATEMENT OF LIMITATIONS

This document entitled MAHOMET SOLAR AMBIENT NOISE STUDY was prepared by RWDI AIR Inc. ("RWDI") for Summit Ridge Energy ("Client"). The results presented in this document have been conducted for the Client and are specific to the project described herein ("Project"). The results represent site conditions at the time the measurements were taken. Since equipment noise and vibration levels may change over time, it is recommended that RWDI be retained by the Client to verify applicability prior to relying on this data for another purpose.

The data contained in this document have also been presented for the specific purpose(s) set out herein. Should the Client or any other third party utilize the document and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this document carefully review the stated assumptions contained herein to understand the different factors which may impact the conclusions and recommendations provided.

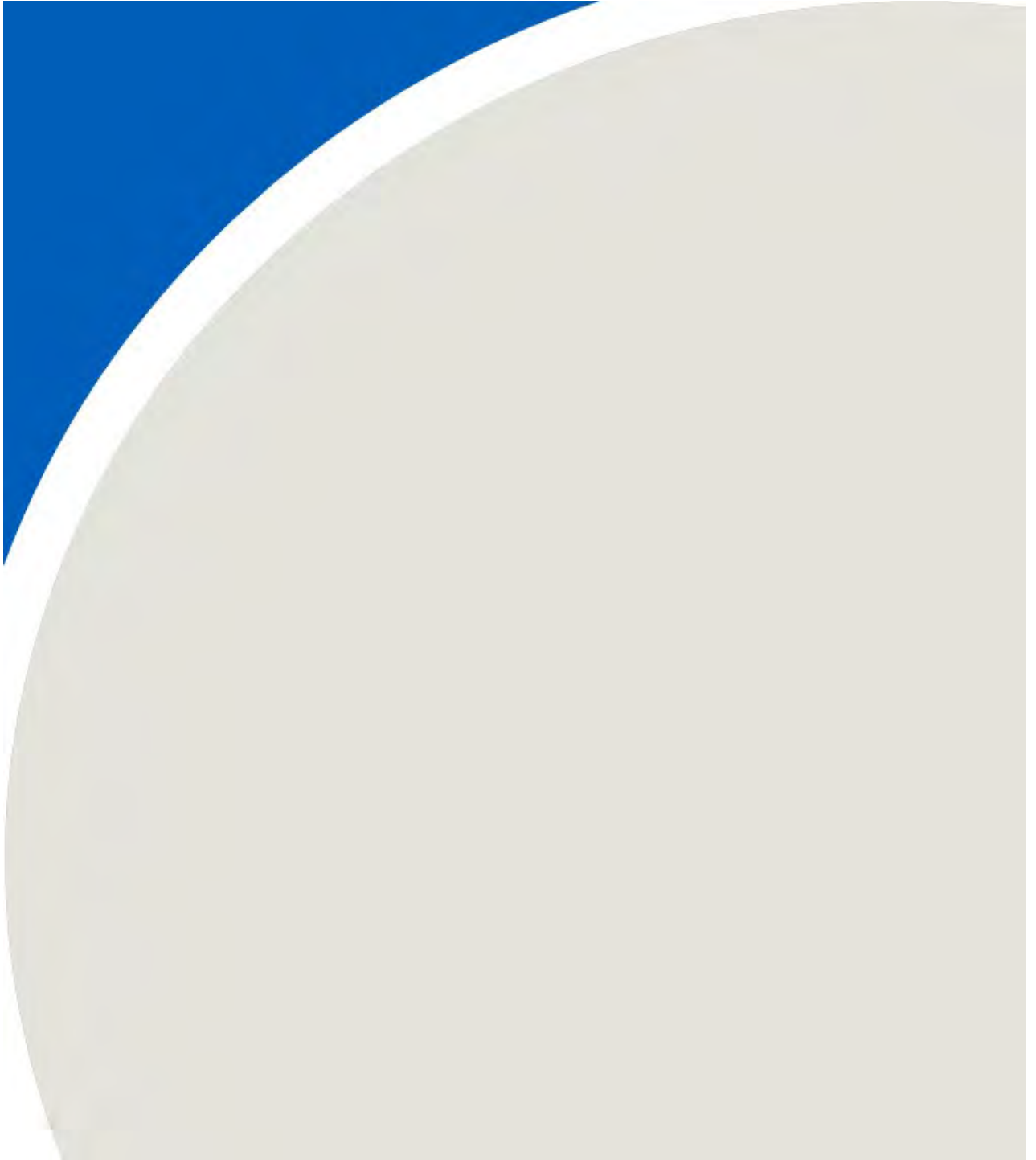


## 7 REFERENCES

1. Illinois Pollution Control Board (IPCB), 2018a. Title 35 Procedural and Environmental Rules - Subtitle H: Noise: Part 900: Part 900: General Provisions
2. Illinois Pollution Control Board (IPCB), 2018b. Title 35 Procedural and Environmental Rules - Subtitle H: Noise: Part 901: Sound Emission Standards And Limitations For Property Line Noise Sources
3. Illinois Pollution Control Board (IPCB), 2018c. Title 35 Procedural and Environmental Rules - Subtitle H: Noise: Part 910: Measurement Procedures For The Enforcement Of 35 Ill. Adm. Code 900 & 901
4. Minnesota Pollution Control Agency (MPCA), 2015. A guide to Noise Control in Minnesota, Acoustic Properties, measurement, analysis, and regulation. Saint Paul, MN.
5. The Village of Mahomet, Illinois Code of Ordinances (VMCO), 2003. Ordinance Chapter 131.19 (2) Nonvehicular Noise Prohibitions.



## APPENDIX A



**CERTIFICATE OF CALIBRATION**  
**# 27868-2**  
**FOR BRÜEL & KJÆR**  
**HANDHELD ANALYZER**

Model **2250 Light**

With Microphone **4950**

With Preamplifier **ZC0032**

Serial No. **3008859**

ID No. **#2**

Serial No. **3072979**

ID No. **25136**

Customer: **RWDI USA LLC**

**Culver City, CA 90232**

P.O. No. **Letter/Abigail Davis**

was tested and met Brüel & Kjær specifications at the points tested  
and as outlined in IEC 61672-3:2006 Class 1

on **19 MAY 2023**

BY **HAROLD LYNCH**  
Service Manager

As received and left condition: Within Specification.

Re-calibration due on: **19 MAY 2024**

**Certified References\***

<u>Mfg.</u>	<u>Type</u>	<u>Serial No.</u>	<u>Cal Date</u>	<u>Due Date</u>
B&K	1051	1846829	07 SEP 2022	07 SEP 2023
B&K	2636	1601487	16 MAY 2023	16 MAY 2024
B&K	4226	3274134	30 NOV 2022	30 NOV 2023
B&K	4231	2094472	14 FEB 2023	14 FEB 2024
HP	34401A	US36071531	25 MAY 2022	25 MAY 2023
HP	3458A	2823A17713	23 SEP 2022	23 SEP 2023

Performed in Compliance with ANSI, NCSL Z-540-1, 1994 and ISO 17025,  
ISO 9001:2015 Certification NQA No. 11252

\*References are traceable to NIST (National Institute of Standards and Technology).

Note: For calibration data see enclosed pages.

The data represent both "as found" and "as left" conditions.

Reference Test Procedure: **ACCT Procedure 2250-Light-2270 Version 3.2.1, Rev. 1/29/14**

Temperature	Relative Humidity	Barometric Pressure
<b>23°C</b>	<b>45 %</b>	<b>990.06 hPa</b>

Note: This calibration report shall not be reproduced, except in full, without written consent by Odin Metrology, Inc.

Signed:



**ODIN METROLOGY, INC.**

CALIBRATION OF BRÜEL & KJÆR INSTRUMENTS  
3537 OLD CONEJO ROAD, SUITE 108 THOUSAND OAKS CA 91320  
PHONE: (805) 375-0830 FAX: (805) 375-0405

# Odin Metrology, Inc.

3537 Old Conejo Road, Suite 108  
Thousand Oaks, CA 91320  
Phone: (805) 375-0830, Fax: (805) 375-0405  
www.OdinMetrology.com

Calibration data for  
**Brüel & Kjær Handheld Analyzer**  
**Type 2250 Light # 3008859, ID# 2**  
With Microphone 4950# 3072979 and Preamplifier ZC0032# 25136  
Performed on May 19, 2023  
for  
RDWI USA, LLC

PO#: Letter  
Certificate#: 27868-2  
Calibration performed by: HL

Environmental Conditions  
Relative humidity: 45%  
Ambient temperature: 23°C  
Ambient pressure: 990.06 hPa

The following calibration was performed per ACCT Procedure 2250-Light-2270 version 3.2.1.  
The data represent both the "As Found" and the "As Left" conditions.

Page No.	Test	IEC Section	Result
<b>Sound Level Meter (IEC 61672 Class 1)</b>			
3	Internal Clock	Reference Only	See Data
3	Sensitivity Verification with Acoustic Calibrator	3 § 9	See Data
3	Acoustic Frequency Response with Microphone	3 § 11	Pass
3	Self-Generated Noise	3 § 10	See Data
4	Output Impedance with Shorted Output	2 § 9.18	Pass
4	AC Full Scale Output Voltage	Reference Only	N/A
4	DC Full Scale Output Voltage	Reference Only	N/A
4	Reset	2 § 9.17	Pass
4	Overload Indication	3 § 18	Pass
5	DC Linearity	Reference Only	N/A
5	Peak-C Sound Level	3 § 17	Pass
5	Decay Time Constants	2 § 9.11	Pass
6	Difference in Indication	3 § 13	Pass
	Frequency Response	3 § 12	
6	A-Weighted		Pass
7	C-Weighted		Pass
8	Z-Weighted		Pass
	Single Toneburst Response (Fast)	3 § 16	
9	A-Weighted		Pass
9	C-Weighted		Pass
10	Z-Weighted		Pass
	Single Toneburst Response (Slow)	3 § 16	
10	A-Weighted		Pass
10	C-Weighted		Pass
11	Z-Weighted		Pass
11	SEL Response to Repeated Tonebursts	1 § 5.9	Pass
12	Level Linearity	3 § 14, 1 § 5.5.6	Pass
<b>RTA Octave Filter (IEC 61260 Class 0)</b>			
	Level Verification of Filter+SLM	Reference Only	
14	1/1 Octave		Pass
14	1/3 Octave		N/A
	Filter Check	Reference Only	
15	1/1 Octave		Pass
15	1/3 Octave		N/A
16	Relative Attenuation (1/1 Octave)	§ 5.3	Pass

The expanded uncertainties stated in this document are the maximum expanded uncertainties permitted by IEC 61672-1. Odin Metrology's actual expanded uncertainties are less than or equal to the values stated herein.

**Internal Clock**

Date and time are transferred from SLM, then the SLM date and time are set according to Odin Metrology's clock and the date and time are transferred from the SLM a second time. Time zones (with minor simplifications) and DST are obeyed.

Local Date/Time: Date and time according to Odin Metrology's clock (Pacific Daylight Time) at the time of the clock setting

Location: US state or other location for which the SLM clock is set (some time zone simplifications are made)

UTC Offset: UTC offset for the given location

Daylight Saving Time: whether DST is currently observed for the given location

SLM Clock Before Set: readouts of the SLM's system date and time before any changes are made

SLM Clock After Set: readouts of the SLM's system date and time after setting

Local (Pacific Daylight Time)		Location	UTC Offset (Hr:Min)	Daylight Saving Time	SLM Clock Before Set		SLM Clock After Set	
Date	Time				Date	Time	Date	Time
5/19/2023	07:41:32 AM	California	-7:00	No	5/19/2023	07:43:04 AM	5/19/2023	07:45:13 AM

**Sensitivity Verification with Acoustic Calibrator (IEC 61672-3 § 9)**

A sound level calibrator is mounted on the sound level meter and the internal calibration is started. The SLM indication is recorded before and after calibration.

Calibrator Frequency: the frequency of the signal generated by the sound level calibrator

Calibrator SPL: the SPL of the signal generated by the sound level calibrator

SLM SPL Before: SLM indication before internal calibration sequence

SLM SPL After: SLM indication after internal calibration sequence (note: ideal value is 93.85 dB due to free-field correction of 0.15 dB)

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Performed with microphone 4950# 3072979, preamplifier ZC0032# 25136 and calibrator 4231# 2094472.

Calibrator Frequency (Hz)	Calibrator SPL (dB)	SLM SPL Before (dB)	SLM SPL After (dB)	Uncertainty (dB)
1,000.0	94.0	93.90	93.89	0.40

**Acoustic Frequency Response with Microphone (61672-3 § 11)**

The acoustical frequency response is tested using a multifunction acoustical calibrator type 4226 in C frequency weighting. If a windscreen is used, these data are to be corrected.

Frequency: the frequency of the signal to the sound level meter (frequency of 4226 multifunction acoustic calibrator)

Data Found: the value the sound level meter actually indicates (this is a pressure measurement)

FF Corr: free-field correction for microphone to be added to displayed SLM (pressure) value

Corrected Response: SLM's reading plus the correction indicated

Nominal Value: what the sound level meter should indicate according to IEC 61672

Tolerance: the acceptable range, including the stated uncertainty, for what the sound level meter should indicate according to IEC 61672

Uncertainty: maximum expanded uncertainty of measurement according to IEC with approximately 95% confidence level (coverage factor

Deviation: the difference between the nominal value and the data found

Performed with microphone 4950# 3072979, preamplifier ZC0032# 25136, and calibrator 4226# 3274134.

Devices with microphones tested: 1000 Hz, 2000 Hz, 4000 Hz, 8000 Hz, 12500 Hz, and 16000 Hz									
Frequency (Hz)	Data Found (dB C)	FF Corr. (dB)	Corrected Response (dB)	Nominal Value (dB C)	Tolerance (dB)		Uncertainty (dB)	Deviation (dB)	Pass/Fail
31.5	91.46	0.00	91.09	90.99	89.49	92.49	0.50	0.10	Pass
63.0	93.50	0.00	93.25	93.18	92.18	94.18		0.07	Pass
125.0	93.70	0.00	93.70	93.83	92.83	94.83		-0.13	Pass
250.0	93.83	0.00	93.96	94.00	93.00	95.00	0.40	-0.04	Pass
500.0	93.76	0.00	93.76	94.03	93.03	95.03		-0.27	Pass
1,000.0	Reference								
2,000.0	93.65	0.36	94.28	93.83	92.83	94.83	0.60	0.35	Pass
4,000.0	92.31	1.21	93.95	93.18	92.18	94.18		0.76	Pass
8,000.0	87.57	3.62	93.33	90.99	88.49	92.49		1.32	Pass
12,500.0	81.42	6.51	88.77	87.76	82.76	89.76	1.00	0.96	Pass
16,000.0	77.75	7.59	87.93	85.47	69.47	87.97		2.46	Pass

**Self-Generated Noise (61672-3 § 10)**

For A-weighting, the noise is measured with the microphone installed and an acoustic chamber on the microphone which eliminates ambient noise. For C- and Z-weighting, the input is terminated with a shorted dummy microphone of equal capacitance.

Frequency Weighting: the frequency weighting setting on the sound level meter

Typical Noise: the typical self-generated noise level according to the manufacturer

Data Found: the 30-second Leq value the sound level meter indicates

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Frequency Weighting	Typical Noise (dB)	Data Found (dB)	Uncertainty (dB)
A	16.60	19.51	0.003
C	12.90	14.12	
Z	25.50	21.36	



**Output Impedance with Shorted Output (61672-2 § 9.18)**

A reference signal is applied to the sound level meter and the outputs are shorted. The indicated level may not be affected by more than the specified tolerance.

Frequency: the frequency of the signal to the sound level meter

Input Level: the level (amplitude) of the signal to the sound level meter

Nominal Value: the value the sound level meter should indicate

Tolerance: the acceptable difference from nominal, including the stated uncertainty, for what the sound level meter should indicate according

Data Found: the value the sound level meter actually indicates

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Frequency (kHz)	Input Level (dB)	Nominal Value (dB)	Tolerance ( $\pm$ dB)	Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
1.0	94.0	94.0	0.10	93.98	0.10	-0.02	Pass

**AC Full Scale Output Voltage**

The sound level meter is set up to indicate full-scale on the display and the AC output is measured. Input frequency is 1,000 Hz.

SPL Reading: the input to the sound level meter is adjusted so that it indicates this full-scale value

Data Found: the value the sound level meter actually indicates

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

SPL Reading (dB)	Data Found (mV)	Uncertainty (mV)
140.00	N/A	0.10

**DC Full Scale Output Voltage**

The sound level meter is set up to indicate full-scale on the display and the DC output is measured. Input frequency is 1,000 Hz.

SPL Reading: the input to the sound level meter is adjusted so that it indicates this full-scale value

Data Found: the value the sound level meter actually indicates

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

SPL Reading (dB)	Data Found (mV)	Uncertainty (mV)
140.05	N/A	0.10

**Reset (IEC 61672-2 § 9.17)**

It is verified that the display resets after pressing the reset button on the SLM. The initial input level is FSD.

Before: displayed value before pressing the reset key

After: displayed value after pressing the reset key

Tolerance: the acceptable range, including the stated uncertainty, for what the sound level meter should indicate

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Before (dB)	After (dB)	Tolerance ( $<$ dB)	Uncertainty (dB)	Pass/Fail
119.51	13.94	50.0	0.003	Pass

**Overload Indication (IEC 61672-3 § 18)**

The first Leq indication of overload at a level higher than FSD-1 dB is recorded for both positive- and negative-one-half-cycle signals at 4.0 kHz. The difference between the two levels may not exceed the specified tolerance.

Overload Level: input signal level (amplitude) at which the meter was found to overload for the specified input signal type

Difference: difference between the overload levels for the positive and negative half-cycle signal inputs

Tolerance: the acceptable difference, including the stated uncertainty, between positive and negative overload levels according to IEC 61672

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Overload Level (dB)	Difference	Tolerance	Uncertainty	Pass/Fail
Positive	Negative	(dB)	( $\leq$ dB)	(dB)
139.80	139.94	0.14	1.5	0.3
				Pass

#### DC Linearity

The sound level meter is set up to indicate full-scale on the display and the DC-output voltage is recorded in decreasing 10-dB steps.

Rel. Input Level: the level (amplitude) of the signal to the sound level meter relative to the reference of full-scale

Data Found: the measured DC-output from the SLM

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Sensitivity: the calculated sensitivity based on the DC-outputs at the highest and lowest levels indicated

Rel. Input Level (dB)	Data Found (mV)	Uncertainty (mV)	Sensitivity (mV/dB)
0.0			N/A
-10.0			
-20.0			
-30.0			
-40.0		0.40	
-50.0			
-60.0			
-70.0			
-80.0			
-90.0			
-100.0			
-110.0		0.05	
-120.0			

#### Peak-C Sound Level (IEC 61672-3 §17)

The sound level meter's peak-C response to single one-cycle and positive- and negative-going half-cycle sinusoidal signals is measured.

Input Level: the steady-state level (amplitude) of the signal to the sound level meter from which the one- and half-cycle signals are extracted

Cycles in Test Signal: the type of burst used (one period, positive half period, or negative half period)

Frequency: the frequency of the signal to the sound level meter

Nominal Value: what the sound level meter should indicate according to IEC 61672

Tolerance: the acceptable difference from nominal, including the stated uncertainty, for what the sound level meter should indicate according

$L_{Cpeak}$  Found: the peak-C sound level value indicated on the sound level meter

Data Found: the difference between the peak-C sound level and the steady-state C-weighted sound level as indicated by the sound level meter ( $L_{Cpeak}-L_C$ )

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Input Level (dB C)	Cycles in Test Signal	Frequency (Hz)	Nominal Value (dB)	Tolerance ( $\pm$ dB)	$L_{Cpeak}$ Found (dB)	Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
	One	8,000.00	3.40	2.00	135.40	3.40		0.00	Pass
132.00	Positive ½	500.00	2.40	1.00	134.03	2.03	0.40	-0.37	Pass
	Negative ½				134.05	2.05		-0.35	Pass

#### Decay Time Constants for Time Weightings Fast and Slow (IEC 61672-2 § 9.11)

The decay rate of the display value on the sound level meter is measured after a steady 4.0 kHz signal is removed.

Time Weighting: the time weighting setting on the sound level meter

Nominal Rate: the decay rate the sound level meter should exhibit according to IEC 61672

Tolerance: the acceptable range, including the stated tolerance, for what the sound level meter should indicate according to IEC 61672

Measured Rate: the actual decay rate measured on the sound level meter

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Time Weighting	Nominal Rate (dB/s)	Tolerance (dB/s)	Measured Rate (dB/s)	Uncertainty (dB/s)	Deviation (dB/S)	Pass/Fail
Fast	N/A	27.00	N/A	41.11	2.00	Pass
Slow	4.35	3.80	4.90	4.50	0.15	Pass

**Difference in Indication (IEC 61672-3 § 13)**

With reference to fast time weighting and A frequency weighting at the SLM reference level indicated, the measurements of all other frequency weighting parameters and all other time weighting parameters may not differ by more than the specified tolerance.

Time Weighting: time weighting setting on the SLM

Frequency Weighting: frequency weighting setting on the SLM

Input Level: the level (amplitude) of the signal to the sound level meter

Nominal Value: the value the sound level meter should indicate according to IEC 61672

Tolerance: the acceptable difference from nominal, including the stated uncertainty, for what the sound level meter should indicate according

Data Found: the value the sound level meter actually indicates

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Deviation: the difference between the nominal value and the data found								
Time Weighting	Frequency Weighting	Input Level (dB)	Nominal Value (dB)	Tolerance (± dB)	Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
	A	94.0	Reference			0.1	Reference	
Fast	C		94.0	0.2	94.00		0.02	Pass
	Z				94.02		0.02	Pass
Slow	A	94.0	0.1	94.00	0.1	0.02	Pass	
	C			94.02		0.02	Pass	
	Z			94.02		0.02	Pass	

**A-Frequency-Weighted Frequency Response (61672-3 § 12)**

The sound level meter's frequency response is recorded by varying the frequency as specified. The reference level is 45 dB less than full scale at 1.0 kHz.

Frequency: the frequency of the signal to the sound level meter

Nominal Value: the value the sound level meter should indicate according to IEC 61672 (this is relative to the reference value at 1.0 kHz)

Tolerance: the acceptable range, including the stated uncertainty, for what the sound level meter should indicate according to IEC 61672

Data Found: the value the sound level meter actually indicates

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Frequency (Hz)	Nominal Value (dB)	Tolerance (dB)		Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
		Minimum	Maximum				
10.0	-70.4	N/A	-67.4	-69.22		1.21	Pass
12.6	-63.4	N/A	-60.9	-62.99		0.39	Pass
15.8	-56.7	-60.7	-54.7	-56.49		0.20	Pass
20.0	-50.5	-52.5	-48.5	-50.45		0.00	Pass
25.1	-44.7	-46.2	-42.7	-44.61		0.09	Pass
31.6	-39.4	-40.9	-37.9	-39.36		0.08	Pass
39.8	-34.6	-35.6	-33.6	-34.66	0.50	-0.03	Pass
50.1	-30.2	-31.2	-29.2	-30.18		0.05	Pass
63.1	-26.2	-27.2	-25.2	-26.16		0.03	Pass
79.4	-22.5	-23.5	-21.5	-22.42		0.08	Pass
100.0	-19.1	-20.1	-18.1	-19.09		0.05	Pass
125.9	-16.1	-17.1	-15.1	-16.05		0.05	Pass
158.5	-13.4	-14.4	-12.4	-13.26		0.09	Pass
199.5	-10.9	-11.9	-9.9	-10.78		0.09	Pass
251.2	-8.6	-9.6	-7.6	-8.54		0.09	Pass
316.2	-6.6	-7.6	-5.6	-6.52		0.09	Pass
398.1	-4.8	-5.8	-3.8	-4.73	0.40	0.08	Pass
501.2	-3.2	-4.2	-2.2	-3.14		0.09	Pass
631.0	-1.9	-2.9	-0.9	-1.81		0.09	Pass
794.3	-0.8	-1.8	0.2	-0.73		0.09	Pass
1,000.0	0.0	Reference					
1,258.9	0.6	-0.4	1.6	0.68	0.40	0.09	Pass
1,584.9	1.0	0.0	2.0	1.08		0.10	Pass
1,995.3	1.2	0.2	2.2	1.30		0.10	Pass
2,511.9	1.3	0.3	2.3	1.37		0.10	Pass
3,162.3	1.2	0.2	2.2	1.31	0.60	0.11	Pass
3,981.1	1.0	0.0	2.0	1.09		0.12	Pass
5,011.9	0.5	-1.0	2.0	0.67		0.12	Pass
6,309.6	-0.1	-2.1	1.4	0.00		0.12	Pass
7,943.3	-1.1	-3.6	0.4	-1.01		0.10	Pass
10,000.0	-2.5	-5.5	-0.5	-2.50		-0.01	Pass
12,589.3	-4.3	-9.3	-2.3	-4.67	1.00	-0.35	Pass
15,848.9	-6.6	-22.6	-4.1	-7.41		-0.81	Pass
19,952.6	-9.3	N/A	-6.3	-8.82		0.50	Pass

**C-Frequency-Weighted Frequency Response (61672-3 § 12)**

The sound level meter's frequency response is recorded by varying the frequency as specified. The reference level is 45 dB less than full scale at 1.0 kHz.

Frequency: the frequency of the signal to the sound level meter

Nominal Value: the value the sound level meter should indicate according to IEC 61672 (this is relative to the reference value at 1.0 kHz)

Tolerance: the acceptable range, including the stated uncertainty, for what the sound level meter should indicate according to IEC 61672

Data Found: the value the sound level meter actually indicates

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Frequency (Hz)	Nominal Value (dB)	Tolerance (dB)		Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
		Minimum	Maximum				
10.0	-14.3	N/A	-11.3	-14.43	0.50	-0.10	Pass
12.6	-11.2	N/A	-8.7	-11.03		0.22	Pass
15.8	-8.5	-12.5	-6.5	-8.33		0.20	Pass
20.0	-6.2	-8.2	-4.2	-6.26		-0.02	Pass
25.1	-4.4	-5.9	-2.4	-4.45		-0.04	Pass
31.6	-3.0	-4.5	-1.5	-3.03		-0.02	Pass
39.8	-2.0	-3.0	-1.0	-1.97		0.03	Pass
50.1	-1.3	-2.3	-0.3	-1.20		0.09	Pass
63.1	-0.8	-1.8	0.2	-0.74		0.08	Pass
79.4	-0.5	-1.5	0.5	-0.43		0.07	Pass
100.0	-0.3	-1.3	0.7	-0.26	0.40	0.04	Pass
125.9	-0.2	-1.2	0.8	-0.11		0.06	Pass
158.5	-0.1	-1.1	0.9	-0.03		0.06	Pass
199.5	0.0	-1.0	1.0	0.03		0.06	Pass
251.2	0.0	-1.0	1.0	0.08		0.08	Pass
316.2	0.0	-1.0	1.0	0.09		0.07	Pass
398.1	0.0	-1.0	1.0	0.11		0.08	Pass
501.2	0.0	-1.0	1.0	0.12		0.09	Pass
631.0	0.0	-1.0	1.0	0.12		0.09	Pass
794.3	0.0	-1.0	1.0	0.10		0.08	Pass
1,000.0	0.0	Reference					
1,258.9	0.0	-1.0	1.0	0.06	0.40	0.09	Pass
1,584.9	-0.1	-1.1	0.9	0.01		0.10	Pass
1,995.3	-0.2	-1.2	0.8	-0.07		0.10	Pass
2,511.9	-0.3	-1.3	0.7	-0.20		0.10	Pass
3,162.3	-0.5	-1.5	0.5	-0.40	0.60	0.10	Pass
3,981.1	-0.8	-1.8	0.2	-0.70		0.12	Pass
5,011.9	-1.3	-2.8	0.2	-1.17		0.12	Pass
6,309.6	-2.0	-4.0	-0.5	-1.87		0.13	Pass
7,943.3	-3.0	-5.5	-1.5	-2.91		0.10	Pass
10,000.0	-4.4	-7.4	-2.4	-4.42		-0.01	Pass
12,589.3	-6.2	-11.2	-4.2	-6.59	1.00	-0.35	Pass
15,848.9	-8.5	-24.5	-6.0	-9.33		-0.80	Pass
19,952.6	-11.2	N/A	-8.2	-10.75		0.50	Pass



**Z-Frequency-Weighted Frequency Response (61672-3 § 12)**

The sound level meter's frequency response is recorded by varying the frequency as specified. The reference level is 45 dB less than full scale at 1.0 kHz.

Frequency: the frequency of the signal to the sound level meter

Nominal Value: the value the sound level meter should indicate according to IEC 61672 (this is relative to the reference value at 1.0 kHz)

Tolerance: the acceptable range, including the stated uncertainty, for what the sound level meter should indicate according to IEC 61672

Data Found: the value the sound level meter actually indicates

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Frequency (Hz)	Nominal Value (dB)	Tolerance (dB)		Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
10.0		N/A	3.0	-0.24		-0.24	Pass
12.6		N/A	2.5	0.17		0.17	Pass
15.8		-4.0	2.0	-0.02		-0.02	Pass
20.0		-2.0	2.0	0.17		0.17	Pass
25.1		-1.5	2.0	0.12		0.12	Pass
31.6		-1.5	1.5	0.02		0.02	Pass
39.8		-1.0	1.0	0.11	0.50	0.11	Pass
50.1		-1.0	1.0	0.05		0.05	Pass
63.1		-1.0	1.0	0.04		0.04	Pass
79.4		-1.0	1.0	0.02		0.02	Pass
100.0		-1.0	1.0	0.08		0.08	Pass
125.9		-1.0	1.0	0.08		0.08	Pass
158.5		-1.0	1.0	0.09		0.09	Pass
199.5		-1.0	1.0	0.06		0.06	Pass
251.2		-1.0	1.0	0.07		0.07	Pass
316.2		-1.0	1.0	0.08		0.08	Pass
398.1	0.0	-1.0	1.0	0.08	0.40	0.08	Pass
501.2		-1.0	1.0	0.09		0.09	Pass
631.0		-1.0	1.0	0.08		0.08	Pass
794.3		-1.0	1.0	0.09		0.09	Pass
1,000.0		Reference					
1,258.9		-1.0	1.0	0.09	0.40	0.09	Pass
1,584.9		-1.0	1.0	0.10		0.10	Pass
1,995.3		-1.0	1.0	0.10		0.10	Pass
2,511.9		-1.0	1.0	0.10		0.10	Pass
3,162.3		-1.0	1.0	0.11		0.11	Pass
3,981.1		-1.0	1.0	0.12	0.60	0.12	Pass
5,011.9		-1.5	1.5	0.12		0.12	Pass
6,309.6		-2.0	1.5	0.12		0.12	Pass
7,943.3		-2.5	1.5	0.09		0.09	Pass
10,000.0		-3.0	2.0	-0.03		-0.03	Pass
12,589.3		-5.0	2.0	-0.35		-0.35	Pass
15,848.9		-16.0	2.5	-0.77	1.00	-0.77	Pass
19,952.6		N/A	3.0	0.34		0.34	Pass

**Single Toneburst Response (Fast Time Weighting, A Frequency Weighting) (61672-3 § 16)**

The sound level meter's response to single tonebursts at 4.0 kHz is measured. The baseline input level is 3 dB less than full scale.

Toneburst Duration: the length of time each burst lasts

Nominal Value: the value sound level meter should indicate according to IEC 61672

Tolerance: the acceptable range, including the stated tolerance, for what the sound level meter should indicate according to IEC 61672

Data Found: the value the sound level meter actually indicates; equal to  $L_{AFmax(toneburst)} - L_{AF(steady-state)}$

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Toneburst Duration (ms)	Nominal Value (dB)	Tolerance (dB)		Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
		Minimum	Maximum				
1,000.00	0.0	-0.5	0.5	-0.04		-0.04	Pass
500.00	-0.1	-0.6	0.4	-0.13		-0.03	Pass
200.00	-1.0	-1.5	-0.5	-1.05		-0.05	Pass
100.00	-2.6	-3.6	-1.6	-2.67		-0.07	Pass
50.00	-4.8	-5.8	-3.8	-4.90		-0.10	Pass
20.00	-8.3	-9.3	-7.3	-8.39	0.20	-0.09	Pass
10.00	-11.1	-12.1	-10.1	-11.22		-0.12	Pass
5.00	-14.1	-15.1	-13.1	-14.16		-0.06	Pass
2.00	-18.0	-19.5	-17.0	-18.11		-0.11	Pass
1.00	-21.0	-23.0	-20.0	-21.14		-0.14	Pass
0.50	-24.0	-26.5	-23.0	-24.18		-0.18	Pass
0.25	-27.0	-30.0	-26.0	-27.18		-0.18	Pass

**Single Toneburst Response (Fast Time Weighting, C Frequency Weighting) (61672-3 § 16)**

The sound level meter's response to single tonebursts at 4.0 kHz is measured. The baseline input level is 3 dB less than full scale.

Toneburst Duration: the length of time each burst lasts

Nominal Value: the value sound level meter should indicate according to IEC 61672

Tolerance: the acceptable range, including the stated tolerance, for what the sound level meter should indicate according to IEC 61672

Data Found: the value the sound level meter actually indicates; equal to  $L_{AFmax(toneburst)} - L_{AF(steady-state)}$

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Toneburst Duration (ms)	Nominal Value (dB)	Tolerance (dB)		Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
		Minimum	Maximum				
1,000.00	0.0	-0.5	0.5	0.17		0.17	Pass
500.00	-0.1	-0.6	0.4	0.08		0.18	Pass
200.00	-1.0	-1.5	-0.5	-0.83		0.17	Pass
100.00	-2.6	-3.6	-1.6	-2.46		0.14	Pass
50.00	-4.8	-5.8	-3.8	-4.69		0.11	Pass
20.00	-8.3	-9.3	-7.3	-8.18	0.20	0.12	Pass
10.00	-11.1	-12.1	-10.1	-11.01		0.09	Pass
5.00	-14.1	-15.1	-13.1	-13.94		0.16	Pass
2.00	-18.0	-19.5	-17.0	-17.84		0.16	Pass
1.00	-21.0	-23.0	-20.0	-20.85		0.15	Pass
0.50	-24.0	-26.5	-23.0	-23.83		0.17	Pass
0.25	-27.0	-30.0	-26.0	-26.76		0.24	Pass

**Single Toneburst Response (Fast Time Weighting, Z Frequency Weighting) (61672-3 § 16)**

The sound level meter's response to single tonebursts at 4.0 kHz is measured. The baseline input level is 3 dB less than full scale.

Toneburst Duration: the length of time each burst lasts

Nominal Value: the value sound level meter should indicate according to IEC 61672

Tolerance: the acceptable range, including the stated tolerance, for what the sound level meter should indicate according to IEC 61672

Data Found: the value the sound level meter actually indicates; equal to  $L_{AFmax(toneburst)} - L_{AF(steady-state)}$

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Toneburst Duration (ms)	Nominal Value (dB)	Tolerance (dB)		Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
		Minimum	Maximum				
1,000.00	0.0	-0.5	0.5	-0.01		-0.01	Pass
500.00	-0.1	-0.6	0.4	-0.09		0.01	Pass
200.00	-1.0	-1.5	-0.5	-1.00		0.00	Pass
100.00	-2.6	-3.6	-1.6	-2.62		-0.02	Pass
50.00	-4.8	-5.8	-3.8	-4.86		-0.06	Pass
20.00	-8.3	-9.3	-7.3	-8.34	0.20	-0.04	Pass
10.00	-11.1	-12.1	-10.1	-11.19		-0.09	Pass
5.00	-14.1	-15.1	-13.1	-14.10		0.00	Pass
2.00	-18.0	-19.5	-17.0	-18.05		-0.05	Pass
1.00	-21.0	-23.0	-20.0	-21.03		-0.03	Pass
0.50	-24.0	-26.5	-23.0	-24.03		-0.03	Pass
0.25	-27.0	-30.0	-26.0	-27.05		-0.05	Pass

**Single Toneburst Response (Slow Time Weighting, A Frequency Weighting) (61672-3 § 16)**

The sound level meter's response to single tonebursts at 4.0 kHz is measured. The baseline input level is 3 dB less than full scale.

Toneburst Duration: the length of time each burst lasts

Nominal Value: the value sound level meter should indicate according to IEC 61672

Tolerance: the acceptable range, including the stated tolerance, for what the sound level meter should indicate according to IEC 61672

Data Found: the value the sound level meter actually indicates; equal to  $L_{AFmax(toneburst)} - L_{AF(steady-state)}$

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Toneburst Duration (ms)	Nominal Value (dB)	Tolerance (dB)		Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
		Minimum	Maximum				
1,000.0	-2.0	-2.5	-1.5	-2.04		-0.04	Pass
500.0	-4.1	-4.6	-3.6	-4.11		-0.01	Pass
200.0	-7.4	-7.9	-6.9	-7.48		-0.08	Pass
100.0	-10.2	-10.7	-9.7	-10.28		-0.08	Pass
50.0	-13.1	-13.6	-12.6	-13.19	0.20	-0.09	Pass
20.0	-17.0	-17.5	-16.5	-17.10		-0.10	Pass
10.0	-20.0	-20.5	-19.5	-20.09		-0.09	Pass
5.0	-23.0	-23.5	-22.5	-23.10		-0.10	Pass
2.0	-27.0	-27.5	-26.5	-27.09		-0.09	Pass

**Single Toneburst Response (Slow Time Weighting, C Frequency Weighting) (61672-3 § 16)**

The sound level meter's response to single tonebursts at 4.0 kHz is measured. The baseline input level is 3 dB less than full scale.

Toneburst Duration: the length of time each burst lasts

Nominal Value: the value sound level meter should indicate according to IEC 61672

Tolerance: the acceptable range, including the stated tolerance, for what the sound level meter should indicate according to IEC 61672

Data Found: the value the sound level meter actually indicates; equal to  $L_{AFmax(toneburst)} - L_{AF(steady-state)}$

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Toneburst Duration (ms)	Nominal Value (dB)	Tolerance (dB)		Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
		Minimum	Maximum				
1,000.0	-2.0	-2.5	-1.5	-1.83		0.17	Pass
500.0	-4.1	-4.6	-3.6	-3.89		0.21	Pass
200.0	-7.4	-7.9	-6.9	-7.27		0.13	Pass
100.0	-10.2	-10.7	-9.7	-10.07		0.13	Pass
50.0	-13.1	-13.6	-12.6	-12.98	0.20	0.12	Pass
20.0	-17.0	-17.5	-16.5	-16.89		0.11	Pass
10.0	-20.0	-20.5	-19.5	-19.88		0.12	Pass
5.0	-23.0	-23.5	-22.5	-22.88		0.12	Pass
2.0	-27.0	-27.5	-26.5	-26.84		0.16	Pass

**Single Toneburst Response (Slow Time Weighting, Z Frequency Weighting) (61672-3 § 16)**

The sound level meter's response to single tonebursts at 4.0 kHz is measured. The baseline input level is 3 dB less than full scale.

Toneburst Duration: the length of time each burst lasts

Nominal Value: the value sound level meter should indicate according to IEC 61672

Tolerance: the acceptable range, including the stated tolerance, for what the sound level meter should indicate according to IEC 61672

Data Found: the value the sound level meter actually indicates; equal to  $L_{AFmax(toneburst)} - L_{AF(steady-state)}$

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Toneburst Duration (ms)	Nominal Value (dB)	Tolerance (dB)		Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
		Minimum	Maximum				
1,000.0	-2.0	-2.5	-1.5	-2.00	0.20	0.00	Pass
500.0	-4.1	-4.6	-3.6	-4.06		0.04	Pass
200.0	-7.4	-7.9	-6.9	-7.44		-0.04	Pass
100.0	-10.2	-10.7	-9.7	-10.24		-0.04	Pass
50.0	-13.1	-13.6	-12.6	-13.15		-0.05	Pass
20.0	-17.0	-17.5	-16.5	-17.06		-0.06	Pass
10.0	-20.0	-20.5	-19.5	-20.05		-0.05	Pass
5.0	-23.0	-23.5	-22.5	-23.05		-0.05	Pass
2.0	-27.0	-27.5	-26.5	-27.02		-0.02	Pass

**SEL Response to Repeated Tonebursts (61672-1 § 5.9)**

The sound level meter's SEL response to repeated tonebursts at 4.0 kHz is measured. The baseline input level is 3 dB less than full scale and the toneburst repetition rate is three times the toneburst duration.

Toneburst Duration: the length of time each burst lasts

Nominal Value: the value the sound level meter should indicate according to IEC 61672

Tolerance: the acceptable range, including the stated tolerance, for what the sound level meter should indicate according to IEC 61672

Data Found: the value the sound level meter actually indicates; equal to  $L_{AFmax(toneburst)} - L_{AF(steady-state)}$

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found

Toneburst Duration (ms)	Nominal Value (dB)	Tolerance (dB)		Data Found (dB)	Uncertainty (dB)	Deviation (dB)	Pass/Fail
		Minimum	Maximum				
1000.0	0.0	-0.5	0.5	-0.06	0.20	-0.06	Pass
500.0	-3.0	-3.5	-2.5	-3.07		-0.07	Pass
200.0	-7.0	-7.5	-6.5	-7.06		-0.06	Pass
100.0	-10.0	-11.0	-9.0	-10.07		-0.07	Pass
50.0	-13.0	-14.0	-12.0	-13.08		-0.08	Pass
20.0	-17.0	-18.0	-16.0	-17.06		-0.06	Pass
10.0	-20.0	-21.0	-19.0	-20.07		-0.07	Pass
5.0	-23.0	-24.0	-22.0	-23.09		-0.09	Pass
2.0	-27.0	-28.5	-26.0	-27.09		-0.09	Pass
1.0	-30.0	-32.0	-29.0	-30.12		-0.12	Pass
0.5	-33.0	-35.5	-32.0	-33.17		-0.17	Pass
0.25	-36.0	-39.0	-35.0	-36.20		-0.20	Pass



**Level Linearity (IEC 61672-3 § 14, IEC 61672-1 § 5.5.6)**

Level linearity is tested in A-weighting at 8.0 kHz. Increasing input levels continue up to the first indication of overload. The test is continued with decreasing input levels down to the lower limit or the first indication of underrange.

Input Level: the level (amplitude) of the signal to the sound level meter

Nominal Value: the value the sound level meter should indicate according to IEC 61672

Tolerance: the acceptable difference from nominal, including the stated uncertainty, according to IEC 61672

Data Found: the value the sound level meter actually indicates

Uncertainty: maximum expanded uncertainty of measurement with approximately 95% confidence level (coverage factor  $k=2$ )

Deviation: the difference between the nominal value and the data found; differential: current and previous measurement is not allowed to exceed 0.5 dB according to IEC 61672-1 § 5.5.6

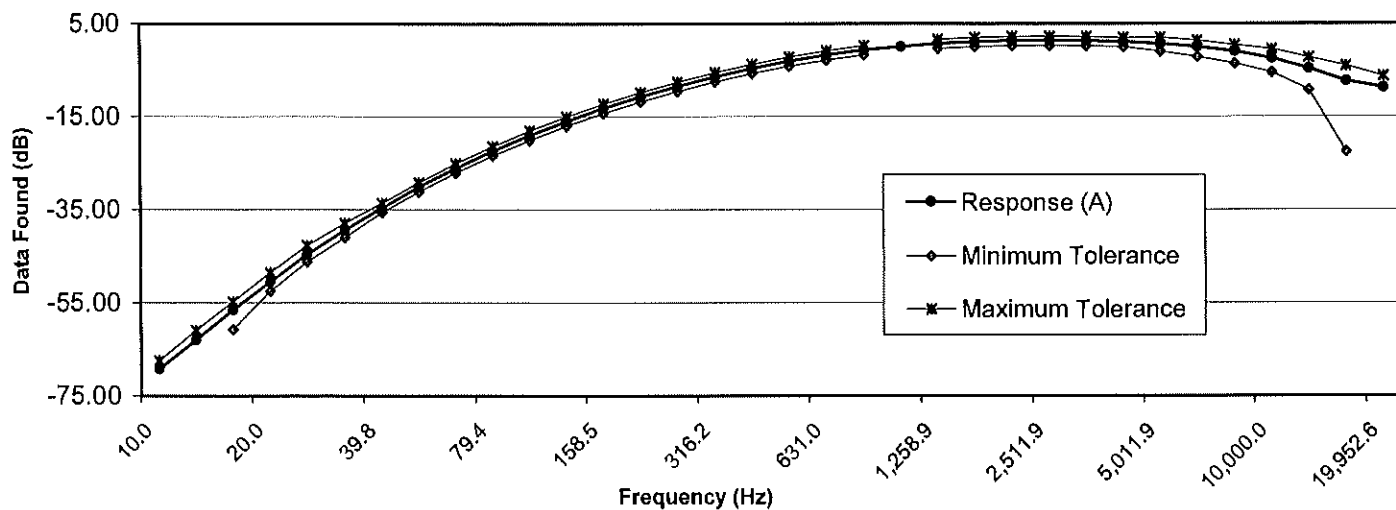
**Part 1: Increasing Input Levels**

Input Level (dB)	Nominal Value (dB)	Tolerance (± dB)	Data Found (dB)	Uncertainty (dB)	Deviation (dB)		Pass/Fail
					Measured	Differential	
94.0			Reference 1				
99.0	99.0		98.98		-0.02	N/A	Pass
104.0	104.0		103.99		-0.01	0.01	Pass
109.0	109.0		108.99		-0.01	0.00	Pass
114.0	114.0		113.99		-0.01	0.00	Pass
119.0	119.0		118.98		-0.02	-0.01	Pass
124.0	124.0		123.99		-0.01	0.01	Pass
129.0	129.0		128.99		-0.01	0.00	Pass
134.0	134.0		133.99		-0.01	0.00	Pass
139.0	139.0		138.98		-0.02	-0.01	Pass
140.0	140.0		Overload		N/A	N/A	N/A
141.0	141.0						
142.0	142.0						
143.0	143.0						
144.0	144.0	0.8		0.3			
145.0	145.0						
146.0	146.0						
147.0	147.0						
148.0	148.0						
149.0	149.0						
150.0	150.0						
151.0	151.0						
152.0	152.0						
153.0	153.0						
154.0	154.0						
155.0	155.0						
156.0	156.0						
157.0	157.0						

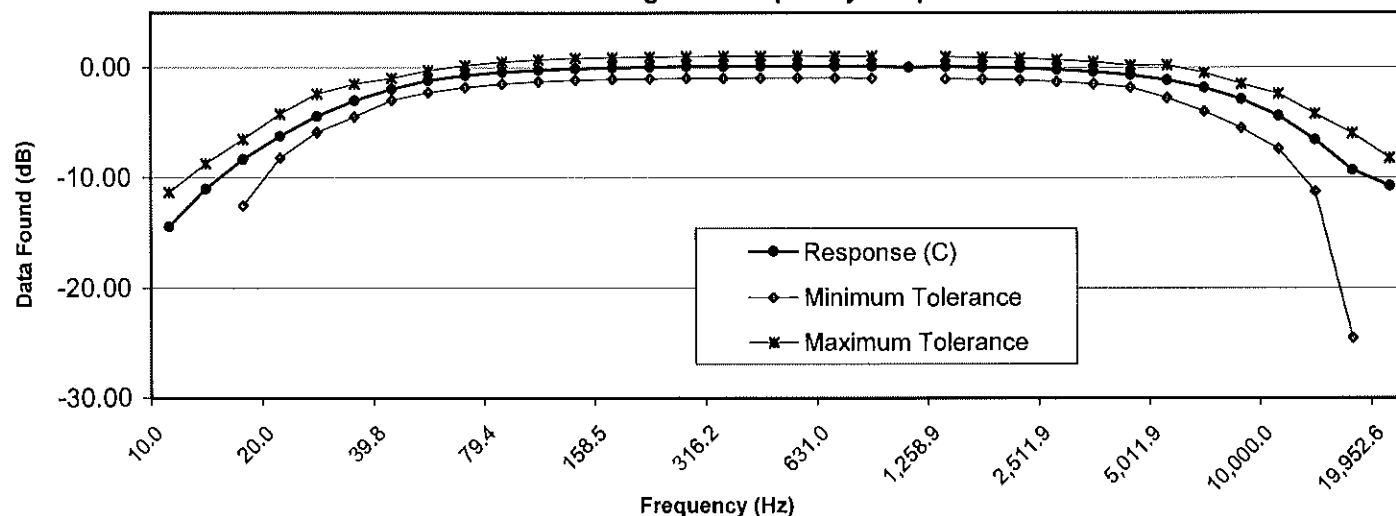
**Part 2: Decreasing Input Levels**

Input Level (dB)	Nominal Value (dB)	Tolerance (± dB)	Data Found (dB)	Uncertainty (dB)	Deviation (dB)		Pass/Fail
					Measured	Differential	
139.0			Reference 2				
134.0	134.0		134.00		0.00	N/A	Pass
129.0	129.0		129.00		0.00	0.00	Pass
124.0	124.0		124.00		0.00	0.00	Pass
119.0	119.0		118.99		-0.01	-0.01	Pass
114.0	114.0		114.00		0.00	0.01	Pass
109.0	109.0		109.00		0.00	0.00	Pass
104.0	104.0		104.00		0.00	0.00	Pass
99.0	99.0		98.99		-0.01	-0.01	Pass
94.0	94.0		94.00		0.00	0.01	Pass
89.0	89.0		88.97		-0.03	-0.03	Pass
84.0	84.0		83.98		-0.02	0.01	Pass
79.0	79.0		78.97		-0.03	-0.01	Pass
74.0	74.0		73.98		-0.02	0.01	Pass
69.0	69.0	0.8	69.00	0.3	0.00	0.02	Pass
64.0	64.0		63.99		-0.01	-0.01	Pass
59.0	59.0		58.98		-0.02	-0.01	Pass
54.0	54.0		54.00		0.00	0.02	Pass
49.0	49.0		48.98		-0.02	-0.02	Pass
44.0	44.0		43.99		-0.01	0.01	Pass
39.0	39.0		38.99		-0.01	0.00	Pass
34.0	34.0		34.01		0.01	0.02	Pass
29.0	29.0		29.12		0.12	0.11	Pass
28.0	28.0		28.17		0.17	0.05	Pass
27.0	27.0		27.16		0.16	-0.01	Pass
26.0	26.0		26.24		0.24	0.08	Pass
25.0	25.0		25.26		0.26	0.02	Pass
24.8	24.8		25.08		0.28	0.02	Pass

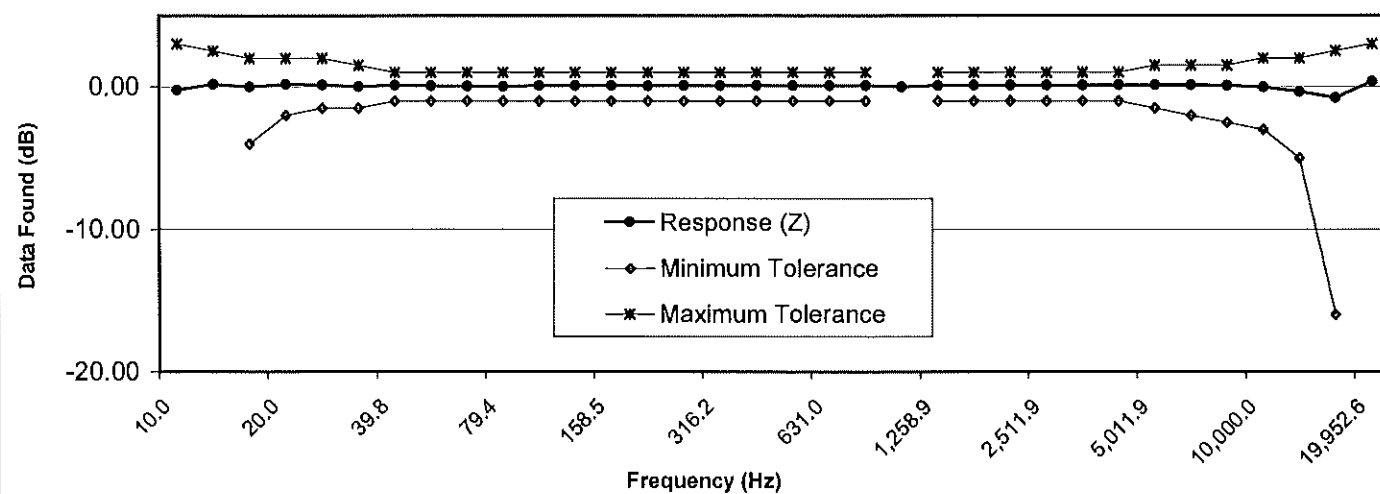
### A-Weighted Frequency Response



### C-Weighted Frequency Response



### Z-Weighted Frequency Response



**Level Verification of Filter+SLM (1/1 Octave)**

For each 1/1 octave filter center frequency, it is verified that the meter indicates within the tolerance shown if the input frequency matches the center frequency.

Filter Center Frequency: center frequency setting on the filter

Input Frequency: frequency of the input signal to the filter

Tolerance: the acceptable range for what the filter should indicate according to Odin Metrology, Inc.

Data Found: the level the sound level meter indicates

Filter Center Freq. (Hz)	Input Freq. (Hz)	Tolerance ( $\pm$ dB)	Data Found (dB)	Result
15.6	15.6		-0.04	Pass
31.3	31.3		0.05	Pass
62.5	62.5		0.03	Pass
125.0	125.0		-0.01	Pass
250.0	250.0	0.5	-0.01	Pass
500.0	500.0		0.00	Pass
1,000.0	1,000.0		-0.01	Pass
2,000.0	2,000.0		-0.01	Pass
4,000.0	4,000.0		0.01	Pass
8,000.0	8,000.0		0.02	Pass
16,000.0	16,000.0		0.02	Pass

**Level Verification of Filter+SLM (1/3 Octave)**

For each 1/3 octave filter center frequency, it is verified that the meter indicates within the tolerance shown if the input frequency matches the center frequency.

Filter Center Frequency: center frequency setting on the filter

Input Frequency: frequency of the input signal to the filter

Tolerance: the acceptable range for what the filter should indicate according to Odin Metrology, Inc.

Data Found: the level the sound level meter indicates

Filter Center Freq. (Hz)	Input Freq. (Hz)	Tolerance ( $\pm$ dB)	Data Found (dB)	Result
12.4	12.4		-0.07	N/A
15.6	15.6		0.08	N/A
19.7	19.7		0.12	N/A
24.8	24.8		0.05	N/A
31.3	31.3		-0.08	N/A
39.4	39.4		-0.05	N/A
49.6	49.6		-0.06	N/A
62.5	62.5		0.02	N/A
78.7	78.7		-0.04	N/A
99.2	99.2		-0.03	N/A
125.0	125.0		0.01	N/A
157.5	157.5		-0.02	N/A
198.4	198.4		0.00	N/A
250.0	250.0		-0.01	N/A
315.0	315.0		0.00	N/A
396.9	396.9	0.5	0.01	N/A
500.0	500.0		0.00	N/A
630.0	630.0		-0.01	N/A
793.7	793.7		0.00	N/A
1,000.0	1,000.0		-0.01	N/A
1,259.9	1,259.9		0.00	N/A
1,587.4	1,587.4		0.00	N/A
2,000.0	2,000.0		-0.01	N/A
2,519.8	2,519.8		0.00	N/A
3,174.8	3,174.8		0.00	N/A
4,000.0	4,000.0		0.01	N/A
5,039.7	5,039.7		0.01	N/A
6,349.6	6,349.6		0.01	N/A
8,000.0	8,000.0		0.02	N/A
10,079.4	10,079.4		0.03	N/A
12,699.2	12,699.2		0.01	N/A
16,000.0	16,000.0		0.00	N/A
20,158.7	20,158.7		0.00	N/A

**Filter Check (1/1 Octave)**

At each center frequency in 1/1 octave step size mode, frequencies equaling the center frequency plus and minus one half octave shall cause the filter to respond with attenuation within the limits stated below.

Filter Center Frequency: center frequency setting on the filter

Input Frequency: the input frequency to the filter calculated as plus and minus one half octave from the center

Tolerance: the acceptable range for what the filter should indicate according to Odin Metrology, Inc.

Data Found: the level the sound level meter indicates

Filter Center Freq. (Hz)	Input Frequency (Hz)		Tolerance (dB)		Data Found (dB)		Result
	-1/2 Octave	+1/2 Octave	Minimum	Maximum	-1/2 Octave	+1/2 Octave	
15.6	11.1	22.1			-3.73	-3.61	Pass
31.3	22.1	44.1			-3.60	-3.57	Pass
62.5	44.2	88.3			-3.61	-3.59	Pass
125.0	88.5	176.6			-3.60	-3.58	Pass
250.0	177.0	353.1			-3.59	-3.59	Pass
500.0	354.0	706.3	-5.7	-1.2	-3.60	-3.59	Pass
1,000.0	707.9	1,412.5			-3.59	-3.58	Pass
2,000.0	1,415.9	2,825.1			-3.60	-3.57	Pass
4,000.0	2,831.8	5,650.2			-3.62	-3.57	Pass
8,000.0	5,663.6	11,300.3			-3.57	-3.85	Pass
16,000.0	11,327.1	22,600.6			N/A	N/A	N/A

**Filter Check (1/3 Octave)**

At each center frequency in 1/3 octave bandwidth, frequencies equaling the center frequency plus and minus one sixth octave shall cause the filter to respond with attenuation within the limits stated below.

Filter Center Frequency: center frequency setting on the filter

Input Frequency: the input frequency to the filter calculated as plus and minus one sixth octave from the

Tolerance: the acceptable range for what the filter should indicate according to Odin Metrology, Inc.

Data Found: the level the sound level meter indicates

Filter Center Freq. (Hz)	Input Frequency (Hz)		Tolerance (dB)		Data Found (dB)		Result
	-1/6 Octave	+1/6 Octave	Minimum	Maximum	-1/6 Octave	+1/6 Octave	
12.4	11.1	13.9			N/A	N/A	N/A
15.6	13.9	17.5			N/A	N/A	N/A
19.7	17.5	22.1			N/A	N/A	N/A
24.8	22.1	27.8			N/A	N/A	N/A
31.3	27.9	35.1			N/A	N/A	N/A
39.4	35.1	44.2			N/A	N/A	N/A
49.6	44.2	55.7			N/A	N/A	N/A
62.5	55.7	70.1			N/A	N/A	N/A
78.7	70.2	88.4			N/A	N/A	N/A
99.2	88.4	111.3			N/A	N/A	N/A
125.0	111.4	140.3			N/A	N/A	N/A
157.5	140.4	176.7			N/A	N/A	N/A
198.4	176.8	222.6			N/A	N/A	N/A
250.0	222.8	280.5			N/A	N/A	N/A
315.0	280.7	353.4			N/A	N/A	N/A
396.9	353.7	445.3	-5.7	-1.2	N/A	N/A	N/A
500.0	445.6	561.0			N/A	N/A	N/A
630.0	561.5	706.8			N/A	N/A	N/A
793.7	707.4	890.5			N/A	N/A	N/A
1,000.0	891.3	1,122.0			N/A	N/A	N/A
1,259.9	1,122.9	1,413.7			N/A	N/A	N/A
1,587.4	1,414.8	1,781.1			N/A	N/A	N/A
2,000.0	1,782.5	2,244.0			N/A	N/A	N/A
2,519.8	2,245.8	2,827.3			N/A	N/A	N/A
3,174.8	2,829.5	3,562.2			N/A	N/A	N/A
4,000.0	3,565.0	4,488.1			N/A	N/A	N/A
5,039.7	4,491.6	5,654.6			N/A	N/A	N/A
6,349.6	5,659.1	7,124.4			N/A	N/A	N/A
8,000.0	7,130.0	8,976.1			N/A	N/A	N/A
10,079.4	8,983.2	11,309.2			N/A	N/A	N/A
12,699.2	11,318.2	14,248.7			N/A	N/A	N/A
16,000.0	14,260.0	17,952.3			N/A	N/A	N/A
20,158.7	17,966.5	22,618.5			N/A	N/A	N/A



**Relative Attenuation at 1,000 Hz (1/1 Octave) (IEC 61260 § 5.3)**

The attenuation of the filter at the given frequencies shall be within the stated tolerance. The frequencies are calculated as octaves from the center frequency. The factors defined by IEC 61260 (Table 1) are:  $\pm 4$ ,  $\pm 3$ ,  $\pm 2$ ,  $\pm 1$ ,  $\pm 1/2$ ,  $\pm 3/8$ ,  $\pm 1/4$ ,  $\pm 1/8$  and 0.

Octaves from Center Frequency: the difference, in octaves, between the selected center frequency (1,000 Hz) and the current input frequency

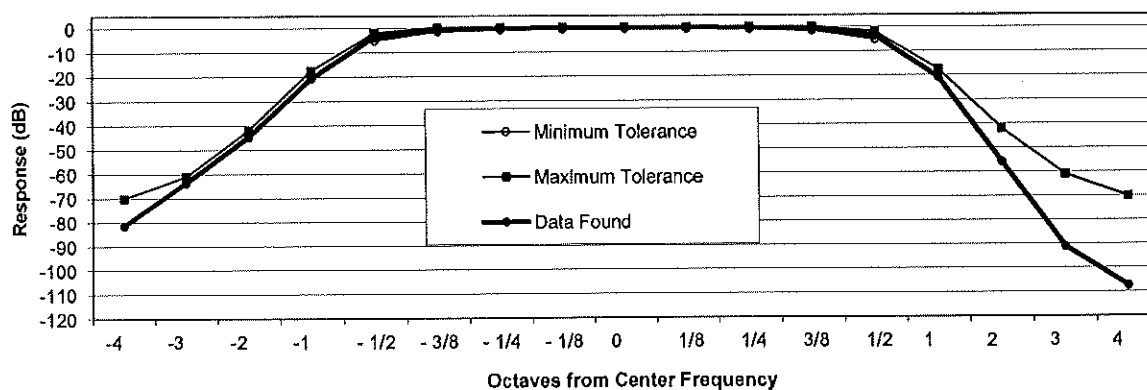
Input Frequency: the input frequency to the filter

Tolerance: the acceptable range for what the filter should indicate according to IEC 61260

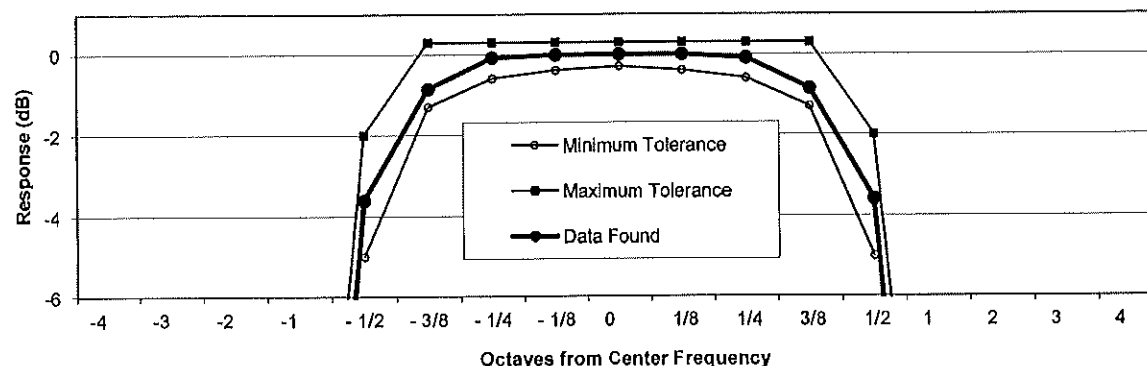
Data Found: the level the sound level meter indicates

Octaves from Center Freq.	Input Freq. (Hz)	Tolerance (dB)		Data Found (dB)	Result
Minimum	Maximum				
-4	63.1	N/A	-70.0	-81.45	Pass
-3	125.9	N/A	-61.0	-63.55	Pass
-2	251.2	N/A	-42.0	-44.69	Pass
-1	501.2	N/A	-17.5	-20.70	Pass
-1/2	707.9	-5.0	-2.0	-3.61	Pass
-3/8	771.8	-1.3	0.3	-0.86	Pass
-1/4	841.4	-0.6	0.3	-0.08	Pass
-1/8	917.3	-0.4	0.3	-0.01	Pass
0	1,000.0	-0.3	0.3	0.00	Pass
1/8	1,090.2	-0.4	0.3	0.00	Pass
1/4	1,188.5	-0.6	0.3	-0.09	Pass
3/8	1,295.7	-1.3	0.3	-0.86	Pass
1/2	1,412.5	-5.0	-2.0	-3.59	Pass
1	1,995.3	N/A	-17.5	-20.83	Pass
2	3,981.1	N/A	-42.0	-55.78	Pass
3	7,943.3	N/A	-61.0	-91.10	Pass
4	15,848.9	N/A	-70.0	-107.36	Pass

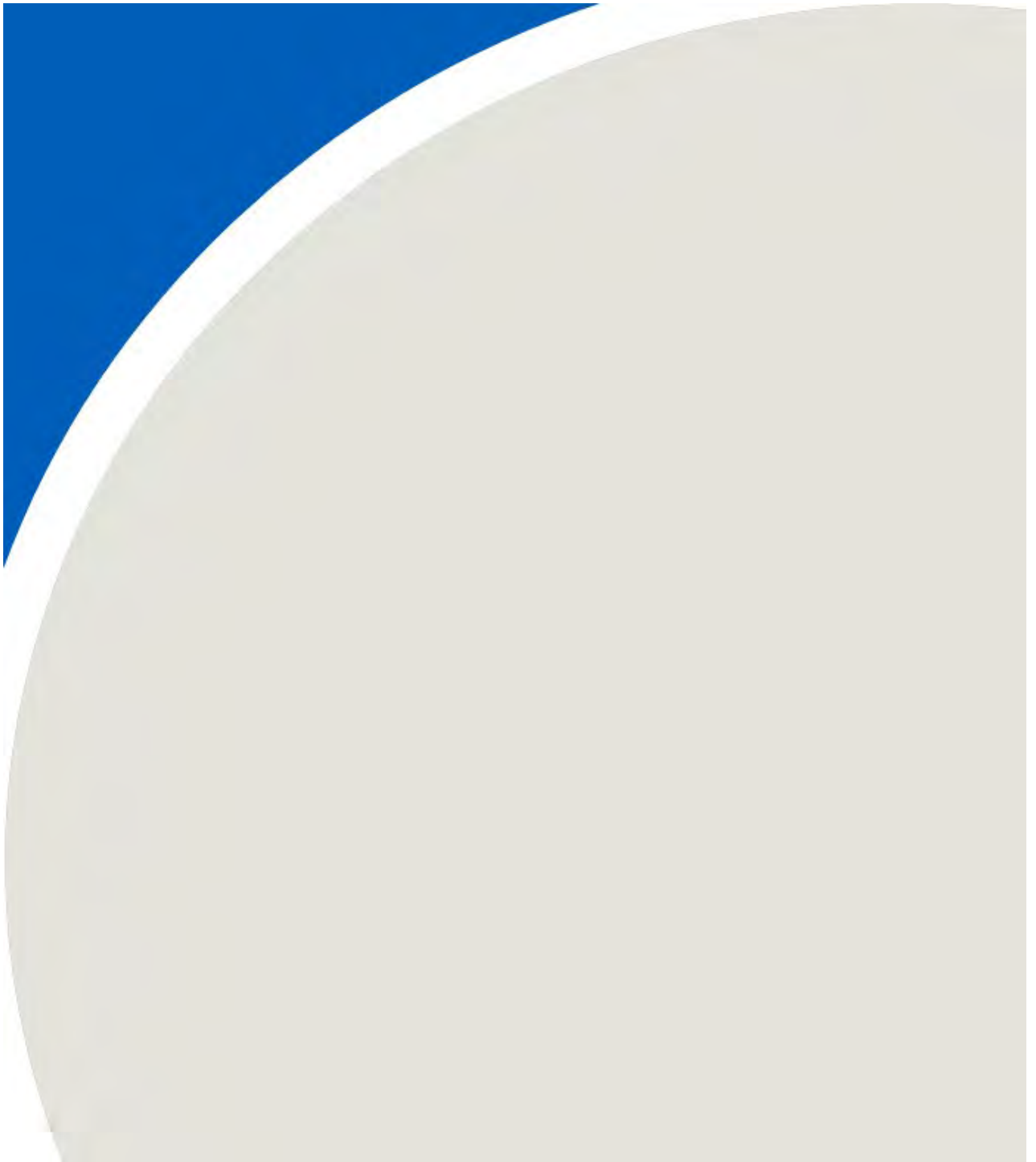
**Relative Attenuation at 1,000 Hz (1/1 Octave) (IEC 61260 § 5.3)**

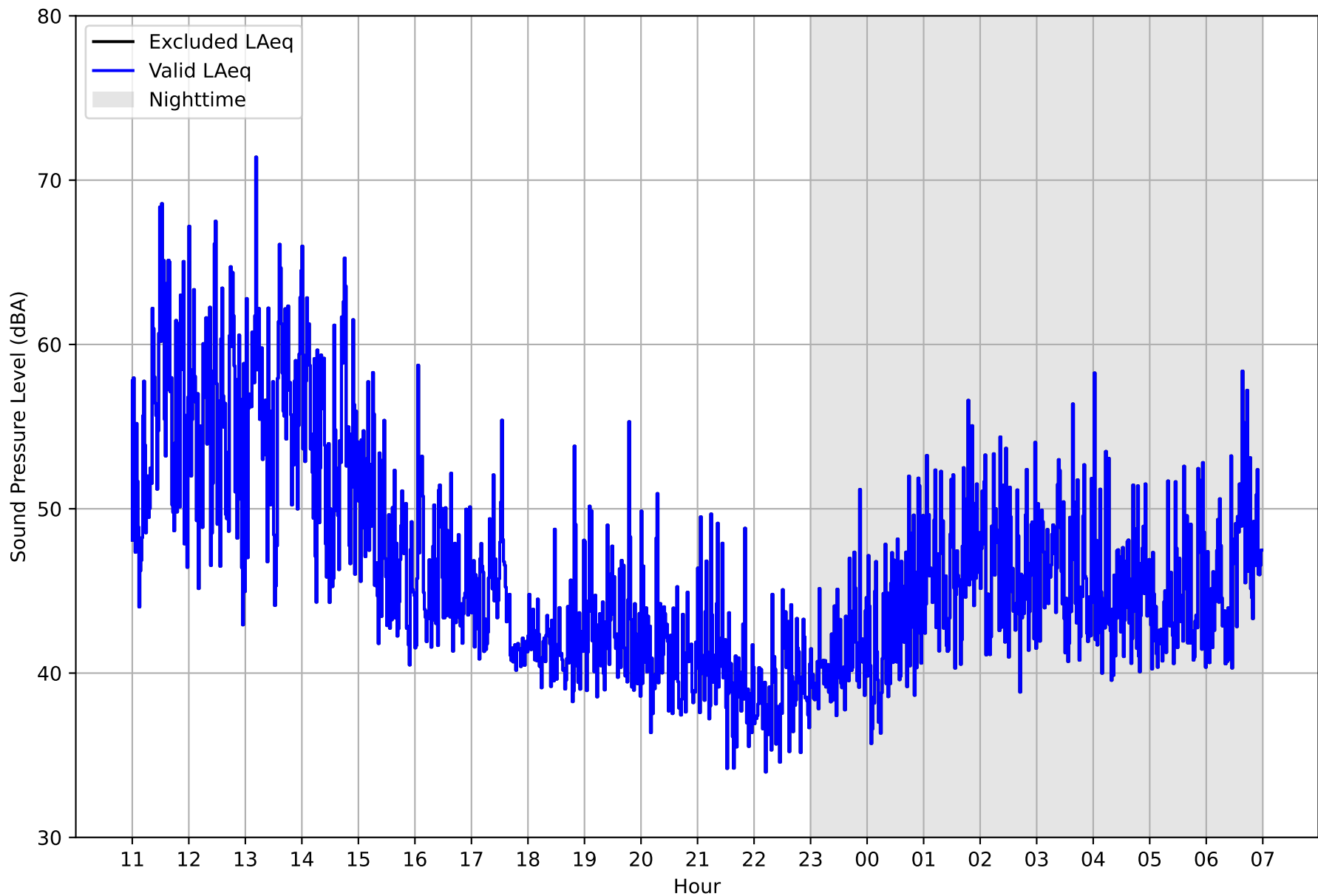


**Relative Attenuation (Detail)**



## APPENDIX B





**Mahomet IL Solar 1**  
**Background Ambient Noise Study**  
**Monitoring Date: 2024-10-29**

Mahomet, IL

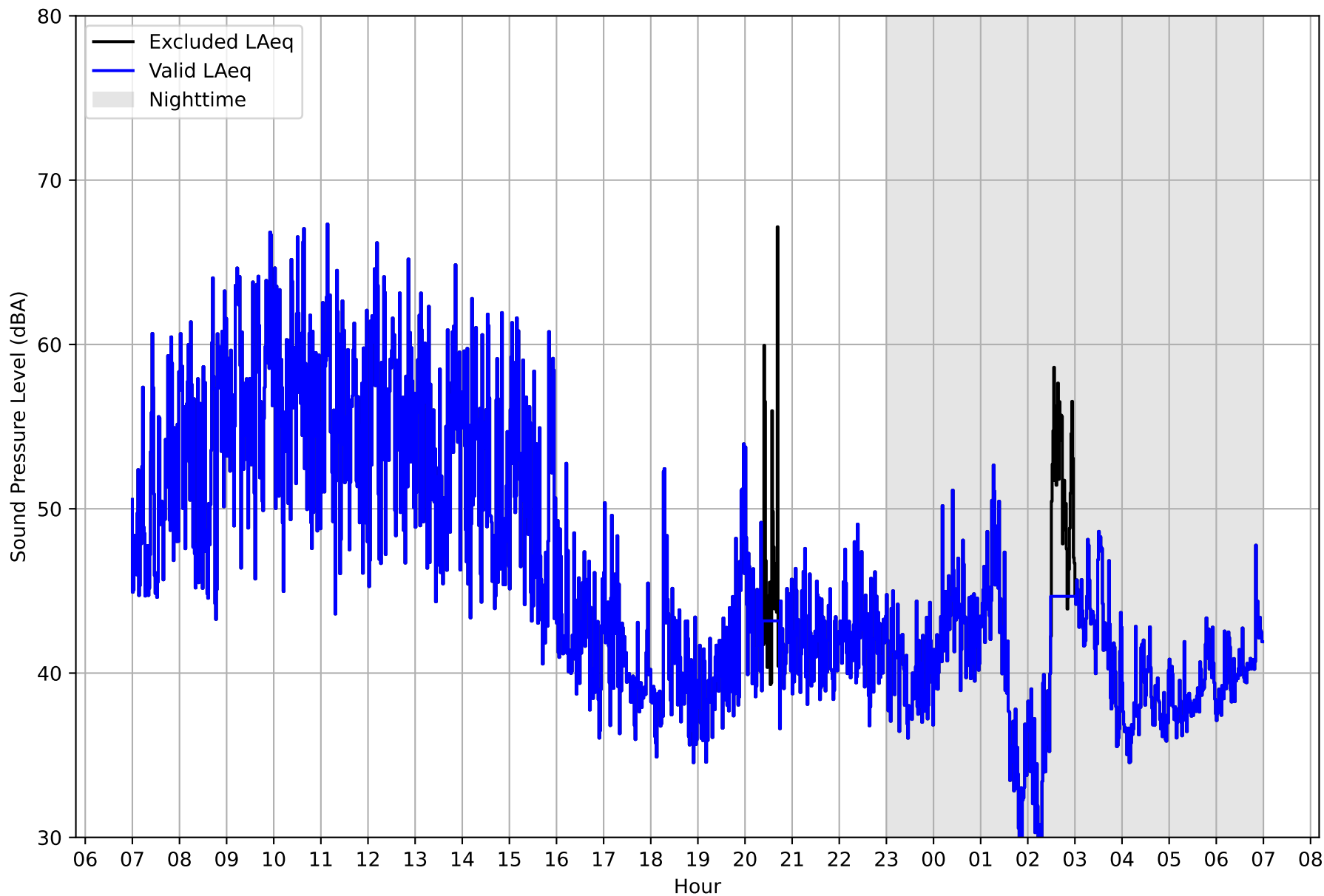
Project #: 2506209

Figure No. B1

Drawn By: DJK

Date Revised: 2024-12-10





**Mahomet IL Solar 1**  
**Background Ambient Noise Study**  
**Monitoring Date: 2024-10-30**

Mahomet, IL

Project #: 2506209

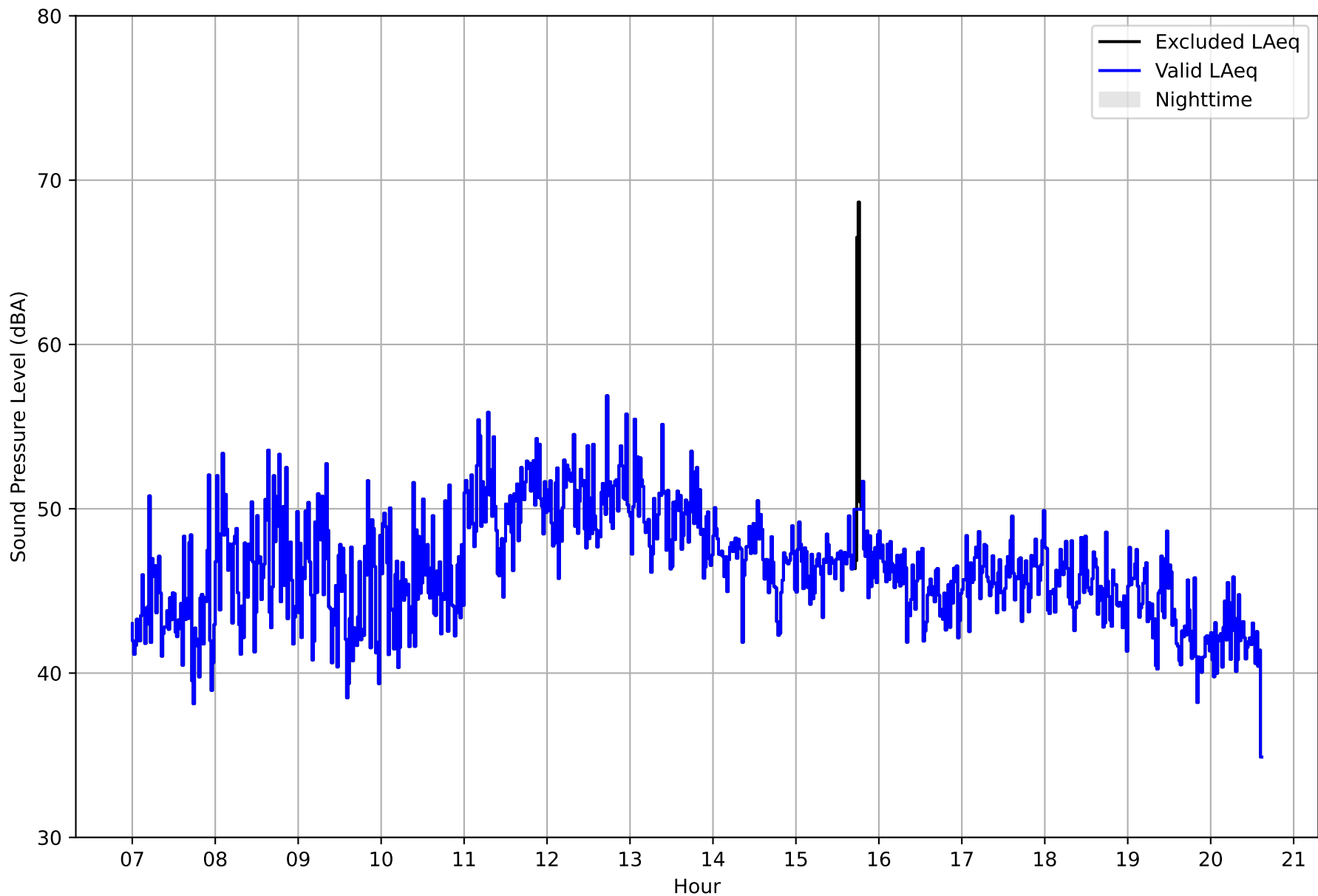
Figure No. B2

Drawn By: DJK

Date Revised: 2024-12-10







**Mahomet IL Solar 1**  
**Background Ambient Noise Study**  
**Monitoring Date: 2024-10-31**

Mahomet, IL

Project #: 2506209

Figure No. B3

Drawn By: DJK

Date Revised: 2024-12-10



## *EXHIBIT K: Drainage Tile Survey*







## *EXHIBIT L: Certificate of Insurance*





# CERTIFICATE OF LIABILITY INSURANCE

Page 1 of 1

DATE (MM/DD/YYYY)

10/02/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Willis Towers Watson Northeast, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA	<b>CONTACT NAME:</b> WTW Certificate Center <b>PHONE (A/C, No. Ext):</b> 1-877-945-7378 <b>E-MAIL ADDRESS:</b> certificates@wtwco.com <b>FAX (A/C, No):</b> 1-888-467-2378																					
<b>INSURED</b> Summit Ridge Energy, LLC 1000 Wilson Boulevard, #2400 Arlington, VA 22209	<table><tr><th colspan="2">INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr><tr><td>INSURER A:</td><td>Travelers Indemnity Company of America</td><td>25666</td></tr><tr><td>INSURER B:</td><td>Travelers Property Casualty Company of Ame</td><td>25674</td></tr><tr><td>INSURER C:</td><td>Federal Insurance Company</td><td>20281</td></tr><tr><td>INSURER D:</td><td>AXIS Surplus Insurance Company</td><td>26620</td></tr><tr><td>INSURER E:</td><td></td><td></td></tr><tr><td>INSURER F:</td><td></td><td></td></tr></table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A:	Travelers Indemnity Company of America	25666	INSURER B:	Travelers Property Casualty Company of Ame	25674	INSURER C:	Federal Insurance Company	20281	INSURER D:	AXIS Surplus Insurance Company	26620	INSURER E:			INSURER F:		
INSURER(S) AFFORDING COVERAGE		NAIC #																				
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INSURER B:	Travelers Property Casualty Company of Ame	25674																				
INSURER C:	Federal Insurance Company	20281																				
INSURER D:	AXIS Surplus Insurance Company	26620																				
INSURER E:																						
INSURER F:																						

**COVERAGES****CERTIFICATE NUMBER:** W35488071**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b>						EACH OCCURRENCE \$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000
		Y	Y	DT-CO-0X735194-TCT-24	09/29/2024	09/29/2025	MED EXP (Any one person) \$ 5,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY \$ 1,000,000
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC						GENERAL AGGREGATE \$ 2,000,000
	OTHER:						PRODUCTS - COMP/OP AGG \$ 2,000,000
							\$
A	<b>AUTOMOBILE LIABILITY</b>						COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> OWNED AUTOS ONLY	Y	Y	BA-0X94099A-24-26-G	09/29/2024	09/29/2025	BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS ONLY						PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY						\$
B	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b>						EACH OCCURRENCE \$ 10,000,000
	<input checked="" type="checkbox"/> EXCESS LIAB			CUP-0X942889-24-26	09/29/2024	09/29/2025	AGGREGATE \$ 10,000,000
	<input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000	Y	Y				\$
C	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>						<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y/N		7184-11-91	08/12/2024	08/12/2025	E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y				E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000
D	Prof/Pollution			CM005972-02-2024	09/29/2024	09/29/2025	Limit \$5,000,000
							Aggregate \$5,000,000
							Retention \$100,000

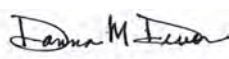
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Certificate Holder is included as an Additional Insured as respects to General Liability, Auto Liability and Umbrella/Excess Liability.

General Liability, Auto Liability and Umbrella/Excess Liability policies shall be Primary and Non-contributory with any other insurance in force for or which may be purchased by Additional Insured.

Waiver of Subrogation applies in favor of Additional Insured with respects to General Liability, Auto Liability, Umbrella/Excess Liability and Workers Compensation as permitted by law.

**CERTIFICATE HOLDER****CANCELLATION**

Evidence of Insurance Only	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 

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ACORD 25 (2016/03)

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SR ID: 26521658

BATCH: 3643920

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **DESIGNATED PERSON OR ORGANIZATION- NOTICE OF CANCELLATION PROVIDED BY US**

This endorsement modifies insurance provided under the  
following: ALL COVERAGE PARTS INCLUDED IN THIS  
POLICY

### **SCHEDULE**

**CANCELLATION:**

**Number of Days Notice:** \_\_\_\_\_ **30** \_\_\_\_\_

**PERSON OR  
ORGANIZATION:**

ANY PERSON OR ORGANIZATION TO WHOM YOU HAVE AGREED IN A WRITTEN  
CONTRACT THAT NOTICE OF CANCELLATION OF THIS POLICY WILL BE GIVEN,  
BUT ONLY

IF:

- 1) YOU SEND US A WRITTEN REQUEST TO PROVIDE SUCH A NOTICE, INCLUDING  
THE NAME  
AND ADDRESS OF SUCH PERSON OR ORGANIZATION, AFTER THE FIRST NAMED  
INSURED  
RECEIVES NOTICE FROM US OF THE CANCELLATION OF THIS POLICY; AND
- 2) WE RECEIVE SUCH WRITTEN REQUEST AT LEAST 14 DAYS BEFORE THE  
BEGINNING OF  
THE APPLICABLE NUMBER OF DAYS SHOWN IN THIS SCHEDULE.

**ADDRESS:**

THE ADDRESS FOR THAT PERSON OR ORGANIZATION INCLUDED IN SUCH WRITTEN  
REQUEST FROM YOU TO US.

### **PROVISIONS**

If we cancel this policy for any legally permitted reason other than nonpayment of premium, and a number of days is shown for Cancellation in the Schedule above, we will mail notice of cancellation to the person or organization shown in such Schedule. We will mail such notice to the address shown in the Schedule above at least the number of days shown for Cancellation in such Schedule before the effective date of cancellation.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **VIRGINIA BUSINESS AUTO COVERAGE EXTENSION ENDORSEMENT**

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

**GENERAL DESCRIPTION OF COVERAGE** – This endorsement broadens coverage. However, coverage for any injury, damage or medical expenses described in any of the provisions of this endorsement may be excluded or limited by another endorsement to the Coverage Part, and these coverage broadening provisions do not apply to the extent that coverage is excluded or limited by such an endorsement. The following listing is a general coverage description only. Limitations and exclusions may apply to these coverages. Read all the provisions of this endorsement and the rest of your policy carefully to determine rights, duties, and what is and is not covered.

- |  |  |
|--|--|
| <p><b>A. BROAD FORM NAMED INSURED</b></p> <p><b>B. BLANKET ADDITIONAL INSURED</b></p> <p><b>C. EMPLOYEE HIRED AUTO</b></p> <p><b>D. EMPLOYEES AS INSURED</b></p> <p><b>E. SUPPLEMENTARY PAYMENTS – INCREASED LIMITS</b></p> <p><b>F. HIRED AUTO – LIMITED WORLDWIDE COVERAGE – INDEMNITY BASIS</b></p> <p><b>G. WAIVER OF DEDUCTIBLE – GLASS</b></p> | <p><b>H. HIRED AUTO PHYSICAL DAMAGE – LOSS OF USE – INCREASED LIMIT</b></p> <p><b>I. PHYSICAL DAMAGE – TRANSPORTATION EXPENSES – INCREASED LIMIT</b></p> <p><b>J. PERSONAL EFFECTS</b></p> <p><b>K. AIRBAGS</b></p> <p><b>L. NOTICE AND KNOWLEDGE OF ACCIDENT OR LOSS</b></p> <p><b>M. BLANKET WAIVER OF SUBROGATION</b></p> |
|--|--|

### **PROVISIONS**

#### **A. BROAD FORM NAMED INSURED**

The following is added to Paragraph **A.1., Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any organization you newly acquire or form during the policy period over which you maintain 50% or more ownership interest and that is not separately insured for Business Auto Coverage. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier.

#### **B. BLANKET ADDITIONAL INSURED**

The following is added to Paragraph **c. in A.1., Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

This includes any person or organization who you are required under a written contract or agreement between you and that person or organization, that is signed by you before the "bodily injury" or "property damage" occurs and

that is in effect during the policy period, to name as an additional insured for Covered Auto Liability Coverage, but only for damages to which this insurance applies and only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Section II.

#### **C. EMPLOYEE HIRED AUTO**

1. The following is added to Paragraph **A.1., Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

An "employee" of yours is an "insured" while operating an "auto" hired or rented under a contract or agreement in an "employee's" name, with your permission, while performing duties related to the conduct of your business.

2. The following replaces Paragraph **b. in B.5., Other Insurance**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

- b.** For **Hired Auto Physical Damage Coverage**, the following are deemed to be covered "autos" you own:

- (1) Any covered "auto" you lease, hire, rent or borrow; and
- (2) Any covered "auto" hired or rented by your "employee" under a contract in an "employee's" name, with your permission, while performing duties related to the conduct of your business.

However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".

#### **D. EMPLOYEES AS INSURED**

The following is added to Paragraph **A.1., Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

#### **E. SUPPLEMENTARY PAYMENTS – INCREASED LIMITS**

1. The following replaces Paragraph **A.2.a.(2)**, of **SECTION II – LIABILITY COVERAGE**:
  - (2) Up to \$3,000 for cost of bail bonds (including bonds for related traffic law violations) required because of an "accident" we cover. We do not have to furnish these bonds.
2. The following replaces Paragraph **A.2.a.(4)**, of **SECTION II – LIABILITY COVERAGE**:
  - (4) All reasonable expenses incurred by the "insured" at our request, including actual loss of earnings up to \$500 a day because of time off from work.

#### **F. HIRED AUTO – LIMITED WORLDWIDE COVERAGE – INDEMNITY BASIS**

The following replaces Subparagraph (5) in Paragraph **B.7., Policy Period, Coverage Territory**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

- (5) Anywhere in the world, except any country or jurisdiction while any trade sanction, embargo, or similar regulation imposed by the United States of America applies to and prohibits the transaction of business with or within such country or jurisdiction, for Covered Autos Liability Coverage for any covered "auto" that you lease, hire, rent or borrow without a driver for a period of 30 days or less and that is not an "auto" you

lease, hire, rent or borrow from any of your "employees", partners (if you are a partnership), members (if you are a limited liability company) or members of their households.

- (a) With respect to any claim made or "suit" brought outside the United States of America, the territories and possessions of the United States of America, Puerto Rico and Canada:

- (i) You must arrange to defend the "insured" against, and investigate or settle any such claim or "suit" and keep us advised of all proceedings and actions.
  - (ii) Neither you nor any other involved "insured" will make any settlement without our consent.
  - (iii) We may, at our discretion, participate in defending the "insured" against, or in the settlement of, any claim or "suit".
  - (iv) We will reimburse the "insured" for sums that the "insured" legally must pay as damages because of "bodily injury" or "property damage" to which this insurance applies, that the "insured" pays with our consent, but only up to the limit described in Paragraph **C., Limits Of Insurance**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**.
  - (v) We will reimburse the "insured" for the reasonable expenses incurred with our consent for your investigation of such claims and your defense of the "insured" against any such "suit", but only up to and included within the limit described in Paragraph **C., Limits Of Insurance**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**, and not in addition to such limit. Our duty to make such payments ends when we have used up the applicable limit of insurance in payments for damages, settlements or defense expenses.
- (b) This insurance is excess over any valid and collectible other insurance available to the "insured" whether primary, excess, contingent or on any other basis.



- (c) This insurance is not a substitute for required or compulsory insurance in any country outside the United States, its territories and possessions, Puerto Rico and Canada.

You agree to maintain all required or compulsory insurance in any such country up to the minimum limits required by local law. Your failure to comply with compulsory insurance requirements will not invalidate the coverage afforded by this policy, but we will only be liable to the same extent we would have been liable had you complied with the compulsory insurance requirements.

- (d) It is understood that we are not an admitted or authorized insurer outside the United States of America, its territories and possessions, Puerto Rico and Canada. We assume no responsibility for the furnishing of certificates of insurance, or for compliance in any way with the laws of other countries relating to insurance.

#### **G. WAIVER OF DEDUCTIBLE – GLASS**

The following is added to Paragraph **D.**, **Deductible**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

No deductible for a covered "auto" will apply to glass damage if the glass is repaired rather than replaced.

#### **H. HIRED AUTO PHYSICAL DAMAGE – LOSS OF USE – INCREASED LIMIT**

The following replaces the last sentence of Paragraph **A.4.b.**, **Loss Of Use Expenses**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

However, the most we will pay for any expenses for loss of use is \$65 per day, to a maximum of \$750 for any one "accident".

#### **I. PHYSICAL DAMAGE — TRANSPORTATION EXPENSES – INCREASED LIMIT**

The following replaces the first sentence in Paragraph **A.4.a.**, **Transportation Expenses**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

We will pay up to \$50 per day to a maximum of \$1,500 for temporary transportation expense incurred by you because of the total theft of a covered "auto" of the private passenger type.

#### **J. PERSONAL EFFECTS**

The following additional coverage is added to Paragraph **A.4.**, **Coverage Extensions**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

##### **Personal Effects**

We will pay up to \$400 for "loss" to wearing apparel and other personal effects which are:

(1) Owned by an "insured"; and

(2) In or on your covered "auto".

This coverage applies only in the event of a total theft of your covered "auto".

This Personal Effects limit does not apply to "loss" to the covered "auto" or its equipment.

No deductibles apply to this Personal Effects coverage.

#### **K. AIRBAGS**

The following is added to Paragraph **B.3.**, **Exclusions**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

Exclusion **3.a.** does not apply to "loss" to one or more airbags in a covered "auto" you own that inflate due to a cause other than a cause of "loss" set forth in Paragraphs **A.1.b.** and **A.1.c.**, but only:

a. If that "auto" is a covered "auto" for Comprehensive Coverage under this policy;

b. The airbags are not covered under any warranty; and

c. The airbags were not intentionally inflated.

We will pay up to a maximum of \$1,000 for any one "loss".

#### **L. NOTICE AND KNOWLEDGE OF ACCIDENT OR LOSS**

The following is added to Paragraph **A.2.a.**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

Your duty to give us or our authorized representative prompt notice of the "accident" or "loss" applies only when the "accident" or "loss" is known to:

(a) You (if you are an individual);

(b) A partner (if you are a partnership);

(c) A member (if you are a limited liability company);

(d) An executive officer, director or insurance manager (if you are a corporation or other organization); or

COMMERCIAL AUTO

- (e) Any "employee" authorized by you to give notice of the "accident" or "loss".

**M. BLANKET WAIVER OF SUBROGATION**

The following is added to Paragraph **A.5., Transfer Of Rights Of Recovery Against Others To Us**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

We waive any right of recovery we may have against any person or organization to the extent required of you by a written contract signed and executed prior to any "accident" or "loss", provided that the "accident" or "loss" arises out of operations contemplated by such contract. The waiver applies only to the person or organization designated in such contract.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **DESIGNATED PERSON OR ORGANIZATION- NOTICE OF CANCELLATION PROVIDED BY US**

This endorsement modifies insurance provided under the  
following: ALL COVERAGE PARTS INCLUDED IN THIS  
POLICY

### **SCHEDULE**

**CANCELLATION:**

**Number of Days Notice:** \_\_\_\_\_ **30** \_\_\_\_\_

**PERSON OR  
ORGANIZATION:**

ANY PERSON OR ORGANIZATION TO WHOM YOU HAVE AGREED IN A WRITTEN  
CONTRACT THAT NOTICE OF CANCELLATION OF THIS POLICY WILL BE GIVEN,  
BUT ONLY

IF:

- 1) YOU SEND US A WRITTEN REQUEST TO PROVIDE SUCH A NOTICE, INCLUDING  
THE NAME  
AND ADDRESS OF SUCH PERSON OR ORGANIZATION, AFTER THE FIRST NAMED  
INSURED  
RECEIVES NOTICE FROM US OF THE CANCELLATION OF THIS POLICY; AND
- 2) WE RECEIVE SUCH WRITTEN REQUEST AT LEAST 14 DAYS BEFORE THE  
BEGINNING OF  
THE APPLICABLE NUMBER OF DAYS SHOWN IN THIS SCHEDULE.

**ADDRESS:**

THE ADDRESS FOR THAT PERSON OR ORGANIZATION INCLUDED IN SUCH WRITTEN  
REQUEST FROM YOU TO US.

### **PROVISIONS**

If we cancel this policy for any legally permitted reason other than nonpayment of premium, and a number of days is shown for Cancellation in the Schedule above, we will mail notice of cancellation to the person or organization shown in such Schedule. We will mail such notice to the address shown in the Schedule above at least the number of days shown for Cancellation in such Schedule before the effective date of cancellation.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **BLANKET ADDITIONAL INSURED** **(Includes Products-Completed Operations If Required By Contract)**

This endorsement modifies insurance provided under the following:  
COMMERCIAL GENERAL LIABILITY COVERAGE PART

### **PROVISIONS**

The following is added to **SECTION II – WHO IS AN INSURED**:

Any person or organization that you agree in a written contract or agreement to include as an additional insured on this Coverage Part is an insured, but only:

- a. With respect to liability for "bodily injury" or "property damage" that occurs, or for "personal injury" caused by an offense that is committed, subsequent to the signing of that contract or agreement and while that part of the contract or agreement is in effect; and
- b. If, and only to the extent that, such injury or damage is caused by acts or omissions of you or your subcontractor in the performance of "your work" to which the written contract or agreement applies. Such person or organization does not qualify as an additional insured with respect to the independent acts or omissions of such person or organization.

The insurance provided to such additional insured is subject to the following provisions:

- a. If the limits of insurance of this Coverage Part shown in the Declarations exceed the minimum limits required by the written contract or agreement, the insurance provided to the additional insured will be limited to such minimum required limits. For the purposes of determining whether this limitation applies, the minimum limits required by the written contract or agreement will be considered to include the minimum limits of any Umbrella or Excess liability coverage required for the additional insured by that written contract or agreement. This provision will not increase the limits of insurance described in Section III – Limits Of Insurance.
- b. The insurance provided to such additional insured does not apply to:

(1) Any "bodily injury", "property damage" or "personal injury" arising out of the providing, or failure to provide, any professional architectural, engineering or surveying services, including:

- (a) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders or change orders, or the preparing, approving, or failing to prepare or approve, drawings and specifications; and
- (b) Supervisory, inspection, architectural or engineering activities.

(2) Any "bodily injury" or "property damage" caused by "your work" and included in the "products-completed operations hazard" unless the written contract or agreement specifically requires you to provide such coverage for that additional insured during the policy period.

c. The additional insured must comply with the following duties:

- (1) Give us written notice as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, such notice should include:
  - (a) How, when and where the "occurrence" or offense took place;
  - (b) The names and addresses of any injured persons and witnesses; and
  - (c) The nature and location of any injury or damage arising out of the "occurrence" or offense.
- (2) If a claim is made or "suit" is brought against the additional insured:



## COMMERCIAL GENERAL LIABILITY

- (a) Immediately record the specifics of the claim or "suit" and the date received; and
  - (b) Notify us as soon as practicable and see to it that we receive written notice of the claim or "suit" as soon as practicable.
- (3) Immediately send us copies of all legal papers received in connection with the claim or "suit", cooperate with us in the investigation or settlement of the claim or defense against the "suit", and otherwise comply with all policy conditions.
- (4) Tender the defense and indemnity of any claim or "suit" to any provider of other insurance which would cover such additional insured for a loss we cover. However, this condition does not affect whether the insurance provided to such additional insured is primary to other insurance available to such additional insured which covers that person or organization as a named insured as described in Paragraph 4., Other Insurance, of Section IV – Commercial General Liability Conditions.

**COMMERCIAL GENERAL LIABILITY****c. Method Of Sharing**

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

**d. Primary And Non-Contributory Insurance If Required By Written Contract**

If you specifically agree in a written contract or agreement that the insurance afforded to an insured under this Coverage Part must apply on a primary basis, or a primary and non-contributory basis, this insurance is primary to other insurance that is available to such insured which covers such insured as a named insured, and we will not share with that other insurance, provided that:

- (1) The "bodily injury" or "property damage" for which coverage is sought occurs; and
- (2) The "personal and advertising injury" for which coverage is sought is caused by an offense that is committed;

subsequent to the signing of that contract or agreement by you.

**5. Premium Audit**

- a. We will compute all premiums for this Coverage Part in accordance with our rules and rates.
- b. Premium shown in this Coverage Part as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period and send notice to the first Named Insured. The due date for audit and retrospective premiums is the date shown as the due date on the bill. If the sum of the advance and audit premiums paid for the policy period is greater than the earned premium, we will return the excess to the first Named Insured.
- c. The first Named Insured must keep records of the information we need for premium computation, and send us copies at such times as we may request.

**6. Representations**

By accepting this policy, you agree:

- a. The statements in the Declarations are accurate and complete;
- b. Those statements are based upon representations you made to us; and
- c. We have issued this policy in reliance upon your representations.

The unintentional omission of, or unintentional error in, any information provided by you which we relied upon in issuing this policy will not prejudice your rights under this insurance. However, this provision does not affect our right to collect additional premium or to exercise our rights of cancellation or nonrenewal in accordance with applicable insurance laws or regulations.

**7. Separation Of Insureds**

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

- a. As if each Named Insured were the only Named Insured; and
- b. Separately to each insured against whom claim is made or "suit" is brought.

**8. Transfer Of Rights Of Recovery Against Others To Us**

If the insured has rights to recover all or part of any payment we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

**9. When We Do Not Renew**

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

**SECTION V – DEFINITIONS**

1. "Advertisement" means a notice that is broadcast or published to the general public or specific market segments about your goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:
  - a. Notices that are published include material placed on the Internet or on similar electronic means of communication; and
  - b. Regarding websites, only that part of a website that is about your goods, products or services for the purposes of attracting customers or supporters is considered an advertisement.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **XTEND ENDORSEMENT FOR CONTRACTORS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**GENERAL DESCRIPTION OF COVERAGE** – This endorsement broadens coverage. However, coverage for any injury, damage or medical expenses described in any of the provisions of this endorsement may be excluded or limited by another endorsement to this Coverage Part, and these coverage broadening provisions do not apply to the extent that coverage is excluded or limited by such an endorsement. The following listing is a general coverage description only. Read all the provisions of this endorsement and the rest of your policy carefully to determine rights, duties, and what is and is not covered.

- |  |   |
|--|---|
| <p><b>A. Who Is An Insured – Unnamed Subsidiaries</b></p> <p><b>B. Blanket Additional Insured – Governmental Entities – Permits Or Authorizations Relating To Operations</b></p> | <p><b>C. Incidental Medical Malpractice</b></p> <p><b>D. Blanket Waiver Of Subrogation</b></p> <p><b>E. Contractual Liability – Railroads</b></p> <p><b>F. Damage To Premises Rented To You</b></p> |
|--|---|

### **PROVISIONS**

#### **A. WHO IS AN INSURED – UNNAMED SUBSIDIARIES**

The following is added to **SECTION II – WHO IS AN INSURED**:

Any of your subsidiaries, other than a partnership, joint venture or limited liability company, that is not shown as a Named Insured in the Declarations is a Named Insured if:

- a. You are the sole owner of, or maintain an ownership interest of more than 50% in, such subsidiary on the first day of the policy period; and
- b. Such subsidiary is not an insured under similar other insurance.

No such subsidiary is an insured for "bodily injury" or "property damage" that occurred, or "personal and advertising injury" caused by an offense committed:

- a. Before you maintained an ownership interest of more than 50% in such subsidiary; or
- b. After the date, if any, during the policy period that you no longer maintain an ownership interest of more than 50% in such subsidiary.

For purposes of Paragraph 1. of Section II – Who Is An Insured, each such subsidiary will be deemed to be designated in the Declarations as:

- a. An organization other than a partnership, joint venture or limited liability company; or
- b. A trust;

as indicated in its name or the documents that govern its structure.

#### **B. BLANKET ADDITIONAL INSURED – GOVERNMENTAL ENTITIES – PERMITS OR AUTHORIZATIONS RELATING TO OPERATIONS**

The following is added to **SECTION II – WHO IS AN INSURED**:

Any governmental entity that has issued a permit or authorization with respect to operations performed by you or on your behalf and that you are required by any ordinance, law, building code or written contract or agreement to include as an additional insured on this Coverage Part is an insured, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" arising out of such operations.

The insurance provided to such governmental entity does not apply to:

- a. Any "bodily injury", "property damage" or "personal and advertising injury" arising out of operations performed for the governmental entity; or
- b. Any "bodily injury" or "property damage" included in the "products-completed operations hazard".

**C. INCIDENTAL MEDICAL MALPRACTICE**

1. The following replaces Paragraph **b.** of the definition of "occurrence" in the **DEFINITIONS** Section:

b. An act or omission committed in providing or failing to provide 'incidental medical services', first aid or "Good Samaritan services" to a person, unless you are in the business or occupation of providing professional health care services.

2. The following replaces the last paragraph of Paragraph 2.a.(1) of **SECTION II – WHO IS AN INSURED**:

Unless you are in the business or occupation of providing professional health care services, Paragraphs (1)(a), (b), (c) and (d) above do not apply to "bodily injury" arising out of providing or failing to provide:

(a) "Incidental medical services" by any of your "employees" who is a nurse, nurse assistant, emergency medical technician or paramedic; or

(b) First aid or "Good Samaritan services" by any of your "employees" or "volunteer workers", other than an employed or volunteer doctor. Any such "employees" or "volunteer workers" providing or failing to provide first aid or "Good Samaritan services" during their work hours for you will be deemed to be acting within the scope of their employment by you or performing duties related to the conduct of your business.

3. The following replaces the last sentence of Paragraph 5. of **SECTION III – LIMITS OF INSURANCE**:

For the purposes of determining the applicable Each Occurrence Limit, all related acts or omissions committed in providing or failing to provide "incidental medical services", first aid or "Good Samaritan services" to any one person will be deemed to be one "occurrence".

4. The following exclusion is added to Paragraph 2., **Exclusions**, of **SECTION I – COVERAGES – COVERAGE A – BODILY INJURY AND PROPERTY DAMAGE LIABILITY**:

**Sale Of Pharmaceuticals**

"Bodily injury" or "property damage" arising out of the violation of a penal statute or ordinance relating to the sale of

pharmaceuticals committed by, or with the knowledge or consent of, the insured.

5. The following is added to the **DEFINITIONS** Section:

"Incidental medical services" means:

a. Medical, surgical, dental, laboratory, x-ray or nursing service or treatment, advice or instruction, or the related furnishing of food or beverages; or

b. The furnishing or dispensing of drugs or medical, dental, or surgical supplies or appliances.

6. The following is added to Paragraph 4.b., **Excess Insurance**, of **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

This insurance is excess over any valid and collectible other insurance, whether primary, excess, contingent or on any other basis, that is available to any of your "employees" for "bodily injury" that arises out of providing or failing to provide 'incidental medical services' to any person to the extent not subject to Paragraph 2.a.(1) of Section II – Who Is An Insured.

**D. BLANKET WAIVER OF SUBROGATION**

The following is added to Paragraph 8., **Transfer Of Rights Of Recovery Against Others To Us**, of **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

If the insured has agreed in a contract or agreement to waive that insured's right of recovery against any person or organization, we waive our right of recovery against such person or organization, but only for payments we make because of:

a. "Bodily injury" or "property damage" that occurs; or

b. "Personal and advertising injury" caused by an offense that is committed;

subsequent to the execution of the contract or agreement.

**E. CONTRACTUAL LIABILITY – RAILROADS**

1. The following replaces Paragraph **c.** of the definition of "insured contract" in the **DEFINITIONS** Section:

c. Any easement or license agreement;



2. Paragraph f.(1) of the definition of 'insured contract' in the **DEFINITIONS** Section is deleted.

**F. DAMAGE TO PREMISES RENTED TO YOU**

The following replaces the definition of "premises damage" in the **DEFINITIONS** Section:

"Premises damage" means "property damage" to:

- a. Any premises while rented to you or temporarily occupied by you with permission of the owner; or
- b. The contents of any premises while such premises is rented to you, if you rent such premises for a period of seven or fewer consecutive days.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **DESIGNATED PERSON OR ORGANIZATION- NOTICE OF CANCELLATION PROVIDED BY US**

This endorsement modifies insurance provided under the  
following: ALL COVERAGE PARTS INCLUDED IN THIS  
POLICY

### **SCHEDULE**

**CANCELLATION:**

**Number of Days Notice:** 30

**PERSON OR  
ORGANIZATION:**

ANY PERSON OR ORGANIZATION TO WHOM YOU HAVE AGREED IN A WRITTEN  
CONTRACT THAT NOTICE OF CANCELLATION OF THIS POLICY WILL BE GIVEN,  
BUT ONLY

IF:

- 1) YOU SEND US A WRITTEN REQUEST TO PROVIDE SUCH A NOTICE, INCLUDING  
THE NAME  
AND ADDRESS OF SUCH PERSON OR ORGANIZATION, AFTER THE FIRST NAMED  
INSURED  
RECEIVES NOTICE FROM US OF THE CANCELLATION OF THIS POLICY; AND
- 2) WE RECEIVE SUCH WRITTEN REQUEST AT LEAST 14 DAYS BEFORE THE  
BEGINNING OF  
THE APPLICABLE NUMBER OF DAYS SHOWN IN THIS SCHEDULE.

**ADDRESS:**

THE ADDRESS FOR THAT PERSON OR ORGANIZATION INCLUDED IN SUCH WRITTEN  
REQUEST FROM YOU TO US.

### **PROVISIONS**

If we cancel this policy for any legally permitted reason other than nonpayment of premium, and a number of days is shown for Cancellation in the Schedule above, we will mail notice of cancellation to the person or organization shown in such Schedule. We will mail such notice to the address shown in the Schedule above at least the number of days shown for Cancellation in such Schedule before the effective date of cancellation.

## *EXHIBIT M: Exterior Fence Warning Signs*





*EXHIBIT N: Federal Aviation Administration FAA  
Determination*



## Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V\_2018.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the FAA Co-location Policy
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

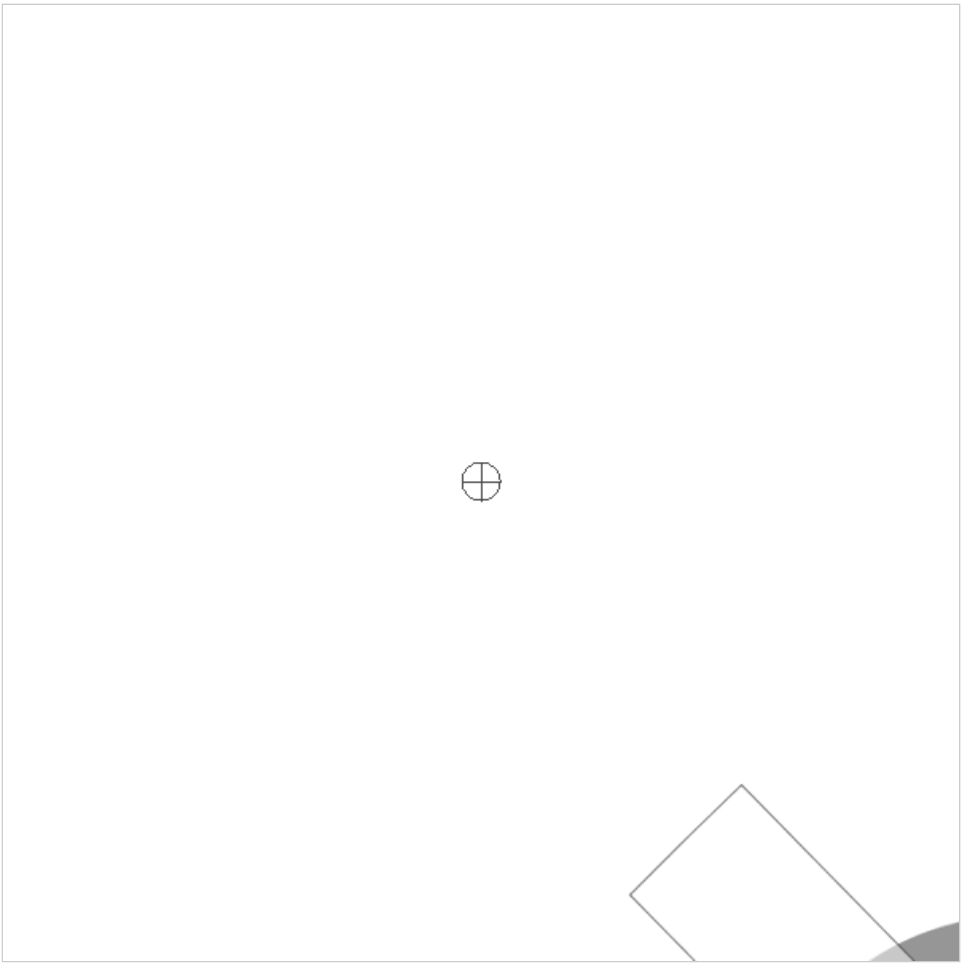
If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

<b>* Structure Type:</b>	SOLAR   Solar Panel ▼			
Please select structure type and complete location point information.				
<b>Latitude:</b>	40	Deg	11	M 42.04 S N ▼
<b>Longitude:</b>	88	Deg	26	M 02.49 S W ▼
<b>Horizontal Datum:</b>	NAD83 ▼			
<b>Site Elevation (SE):</b>	713	(nearest foot)		
<b>Structure Height :</b>	15	(nearest foot)		
<b>Is structure on airport:</b>	<input checked="" type="radio"/> No <input type="radio"/> Yes			

### Results

You do not exceed Notice Criteria.



*EXHIBIT O: Notice to the Village of Mahomet*



**From:** [Moirá Cronin](#)  
**To:** [Abby Heckman](#); [Patrick Brown](#)  
**Subject:** Copy of Mahomet IL Solar 1, LLC Special Use Permit Application to Champaign County  
**Date:** Friday, January 3, 2025 9:52:00 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)

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Hi Abby and Patrick,

We are finally submitting our Mahomet IL Solar 1, LLC Special Use Permit Application to Champaign County. As required by the County, please find a copy of our Application linked in this email. As you said in your March 22, 2024 email, we will submit our Subdivision application to the Village of Mahomet after we receive our ZBA approval.

 [\(1.3.25\) Mahomet SUP Application\\_Final.pdf](#)

Best,



**Moirá Cronin**

Senior Manager, Project Development

c: 978-505-3320

[mcronin@srenergy.com](mailto:mcronin@srenergy.com)

in X [srenergy.com](https://srenergy.com)

## *EXHIBIT P: Notice to the Fire Department*

**From:** [Moirá Cronin](#)  
**To:** ["firedepartment@champaignil.gov"](mailto:firedepartment@champaignil.gov)  
**Subject:** Mahomet IL Solar 1, LLC Site Plan  
**Date:** Thursday, January 2, 2025 6:26:00 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[Mahomet IL Solar 1, LLC Site Plan.pdf](#)

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Dear Champaign County Fire Department,

Per the County's Special Use Permit requirements please see a copy of Mahomet IL Solar 1, LLC's site plan for your review. The access point and access road to and from the community solar farm was designed according to feedback from the road use commissioner, Chris. There is more than 40' turning radius for a truck or fire truck to turn around.

Best,



**Moirá Cronin**

Senior Manager, Project Development

c: 978-505-3320

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## *EXHIBIT Q: Special Use Permit Procedure*



## **RE: SPECIAL USE PERMIT PROCEDURE**

Attached please find materials related to an application of a Special Use Permit under the provisions of the Champaign County Zoning Ordinance. A Special Use Permit request requires a public hearing before the Champaign County Zoning Board of Appeals which is the granting authority with respect to such requests.

The Zoning Board of Appeals (ZBA) is a seven member board, the members of which are appointed by the Champaign County Board to conduct all zoning and land use public hearings for unincorporated Champaign County. The ZBA meets regularly on the second and fourth Thursdays of each month to conduct its public hearings. Special Use Permit cases generally appear before the ZBA at only one meeting; however, if the Board requests more information the case could be continued to the next available hearing. The petitioner or an agent must be present at the public hearing to give testimony and answer any questions from the Board members, staff, or any other interested party.

Completed applications are required to be submitted no less than 22 days in advance of the next available ZBA public hearing date. However, agenda items are docketed on a first-come first-serve basis, based upon submission of the completed application and filing fee. Docket space is limited for each meeting; therefore, an extra time frame should be anticipated in the event of an overloaded docket, etc. Please contact this Department to determine the date of the next available public hearing date.

This Department serves as staff for the Zoning Board of Appeals, and prepares all notifications and memorandum to be distributed to the Board and other interested parties. As required by state law, all public hearings before the ZBA are published as public notices in a newspaper of general circulation published in the county and having circulation where such property is located. If no local newspaper exists, then such notice is published in the News Gazette. The By-laws of the ZBA further require that all landowners within 250 feet of the subject property be notified of the request by regular mail. If applicable, notice is also given to the Township Supervisor, the Drainage District Commissioner, the Fire District Chief, as well as any municipality within one and one-half miles of the site.

Department staff prepares all case memoranda, which outline the available facts and issues of the request. Staff does not, however, make recommendations within respect to zoning cases. The case memoranda provide a review of the request, and a series of case maps regarding location, land use, and zoning of the property and its surrounding area. The memos are mailed to the ZBA members, the petitioner, and any other interested parties approximately one week prior to the public hearing.

Members of the Board may visit the property for a site analysis, however, please be advised that communications with Board members outside of the public hearing are considered ex-parte communications, and are prohibited. All questions and comments regarding the case from any party should be directed to the full Board during the course of the public hearing.

Question numbers 12 through 15 on the application reflect the Special Use Permit criteria outlined in the Zoning Ordinance. The Board is required to make specific findings of fact with respect to each these criteria, and then render its decision based upon those findings. These questions should therefore be reviewed and answered as thoroughly as possible, as they are the petitioner's first opportunity to make affirmative findings with respect to their request. Outstanding questions combined with a considerable amount of testimony may warrant a continuation of the case to the next available ZBA docket.

An integral part of the Special Use Permit application is the site plan, which should include all existing and proposed structures, interior and exterior facilities, and applicable setback distances from the property lines. Structures and outdoor areas to be used in conjunction with the proposed use should be labeled with their appropriate uses.

In the event that a site is within the One and One-Half Mile Extraterritorial Jurisdiction (ETJ) of a municipality, the municipality retains subdivision jurisdiction, as well as the right to consider a protest/no protest vote with respect to Special Use Permit requests. The municipality with ETJ will conduct its own meetings with respect to the case, and although the petitioner's attendance is not required at municipal meetings, it may be advisable to attend in order to answer any questions that may arise. A municipal protest with respect to a Special Use Permit has no impact on the number of affirmative votes, which remains constant at four out of seven required to grant the request.

All Special Use Permit requests are also subject to review by the Soil and Water Conservation District by way of a Natural Resource Report. Applications for this report are available from this Department, and its fee, separate and apart from the Special Use Permit application fee, is based upon the acreage of the site. Questions regarding this report should be directed to the SWCD at 352-4654.

Pursuant to Section 6 of the Zoning Ordinance, certain Special Uses are subject to standard conditions, which will be imposed unless they are otherwise requested to be waived upon application. The Board is also permitted to impose additional conditions of approval as necessary to protect the public health, safety, and welfare.

Upon approval of the Special Use Permit, a Zoning Use Permit must be received from this Department, which authorizes new construction and/or establishment of a new use on the subject property. The fee for this permit is based upon the size and type of the new structure(s), including signs and parking areas. If no new construction is proposed, a Change of Use Permit must be applied for, which has a filing fee of \$98.

A site plan is also required to be submitted with the Zoning Use Permit Application, which generally requires a greater level of detail than the site plan submitted with the Special Use Permit application. All structures and facilities, both interior and exterior, are required to be noted and dimensioned, and interior spaces and uses should be delineated as well. Specific notations with respect to parking requirements, outdoor storage, screening, signage, etc., will also be required, if applicable.

All new construction for public use, including parking areas, is subject to the provisions of the Illinois Environmental Barriers Act. This site plan must indicate compliance with or exemption from the Act through a sealed and signed statement from an Illinois Registered Architect or Structural Engineer. While this Department is required to ensure the site plans indicate compliance with the IEBA, we are not eligible to interpret the Act. Therefore, specific questions regarding specific provisions of the Act and its applicability should be directed your architect or engineer.

Lastly, approval of the Special Use Permit pursuant to the Zoning Ordinance criteria allows a use of a certain scope and intensity as proposed in the application and its site plan. Any future deviations from the approved request or any imposed conditions must be submitted to the Planning and Zoning Department, and any expansion deemed a significant deviation from the originally approved use must re-apply as another Special Use Permit.

This handout is an outline of the major provisions regarding Special Use Permit applications. Please contact the Department of Planning and Zoning at 384-3708 for further information. Copies of the Zoning Ordinance and the Zoning Board of Appeals By-laws are also available for purchase at the Department of Planning and Zoning, Brookens Administrative Center, 1776 East Washington Street, Urbana, IL 61802.

**FOR OFFICE USE ONLY**

Township \_\_\_\_\_ Section \_\_\_\_\_  
Case No. \_\_\_\_\_  
Date \_\_\_\_\_ Receipt # \_\_\_\_\_  
Zoning District \_\_\_\_\_  
PIN \_\_\_\_\_

**CHAMPAIGN COUNTY, ILLINOIS**

**APPLICATION FOR SPECIAL USE PERMIT**

1. Applicant Name(s)	Phone	Address
Mahomet IL Solar 1, LLC	978.505.3320	1000 Wilson Blvd #2400
_____	_____	Arlington, VA 22209
_____	_____	_____

Email of lead applicant: [mcronin@SREnergy.com](mailto:mcronin@SREnergy.com)

2. Location of subject parcel(s) County Road 125 E , Mahomet, IL 61853  
Long: 40.194906 and Lat: -88.434093

3. Property Identification Number (PIN): 15-13-17-100-012

4. Legal Description [*Note: This application cannot be processed unless accurate and complete legal description of subject parcel(s) is included with this form*]

See attachment

5. Area of subject property: ~95.9 acres or \_\_\_\_\_ square feet

6. Existing use(s):

Farming

7. Number and type of **existing** principal buildings:

zero

8. Number and type of **existing** accessory buildings and structures:

zero

9. Number of **existing** dwelling units: zero

10. Proposed use(s): Solar farm

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11. Attach an accurate site plan, no larger than 11x17, showing the boundaries of the subject property, adjacent streets, existing buildings, driveways and other structures. Provide dimensions, sufficient to accurately determine the size and location of all structures. *[Note: other drawings may also be required.]*

12. Reasons the proposed use is necessary for the public convenience at the above noted location:  
A County Board Special Use Permit (is required for a community solar farm in unincorporated Champaign  
County

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13. List those reasons which will ensure to the County that the proposed land use is designed, located, and operated so that it will not be injurious to the District in which it shall be located or otherwise detrimental to the public welfare. Attach plans if necessary.

Access was coordinated with Chris, the road use commissioner and has a long access road to be offset from  
County road 125 to reduce visibility from the road. Landscape plan also reduces visibility to the subdivision.

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14. Does the proposed use conform to the applicable regulations and standards of, and preserve the essential character of, the District in which it shall be located except where such regulations and standards are modified by Section 6 of the County Zoning Ordinance?

In our opinion yes, it is not detrimental to the Character of the District. Other solar projects have been approved  
and build in the County.

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15. If the property is an existing non-conforming use, will the Special Use make its use more compatible with its surroundings?

Adjacent to the highway and behind a subdivision, the community solar will become a commercial facility  
so in some ways yes, other ways no. We met with the Village of Mahomet and they were not again the project.

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16. Time schedule for development (if applicable): Start construction approximately 60 days after approval

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17. Additional exhibits submitted by applicant:

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18. Applicant Signature(s)

Date

Maira Cronin

7/11/24

Maira Cronin

*NOTE: If signed by persons other than petitioner(s), state whether Agent or Attorney and give address and telephone number.*



## Property Legal Description

Part of the North Half of Section 17, Township 20 North, Range 7 East of the Third Principal Meridian in Champaign County, Illinois, being more particularly described as follows:

Beginning at the Southwest corner of the East Half of the Northwest Quarter of Section 17, Township 20 North, Range 7 East of the Third Principal Meridian, proceed on a record bearing of North 00°05'01" East 696.89 feet along the West line of the East Half of the Northwest Quarter of said Section 17 to the Southwest corner of a survey for Russell Taylor by Wesley J. Meyers, Illinois Professional Land Surveyor No 2803, dated August 14, 1991; thence South 89°54'59" East 380.00 feet perpendicular to the West line of the East Half of the Northwest Quarter of said Section 17 along the South line of said survey for Russell Taylor to the Southeast corner of said survey; thence North 00°05'01" East 360.00 feet parallel to the West line of the East Half of the Northwest Quarter of said Section 17 along the East line of said survey for Russell Taylor to the Northeast corner of said survey; thence North 89°54'59" West 380.00 feet perpendicular to the West line of the East Half of the Northwest Quarter of said Section 17 along the North line of said survey for Russell Taylor to the Northwest corner of said survey being on the West line of the East Half of the Northwest Quarter of said Section 17; thence North 00°05'01" East 964.77 feet along said West line to the Southerly right of way line of the Norfolk Southern Railroad; thence South 73°46'16" East 2,780.87 feet along said Southerly right of way line to the East line of the West Half of the Northeast Quarter of said Section 17; thence South 00°04'07" West 1,202.87 feet along said East line to the Southeast corner of the West Half of the Northeast Quarter of said Section 17; thence South 89°06'28" West 2,671.90 feet along the South line of the North Half of said Section 17 to the Point of Beginning, situated in Mahomet Township, Champaign County, Illinois.