



**Application for Special Use Permit  
for  
Pallme Farm Solar**

**Submitted to Kane County, IL**

by

Karen and Ed Pallme (Landowner)  
&  
Horizon Solar Power, LLC (Developer)  
&  
ILSolar08 LLC (Project Owner)

January 8<sup>th</sup>, 2026



Kane County  
c/o Natalie Zine, Building & Zoning Division Manager  
719 Batavia Avenue - Bldg A, 4th Floor  
Geneva IL 60134

(with an email copy to: [zinenatalie@kanecountyIL.gov](mailto:zinenatalie@kanecountyIL.gov))

To Kane County,

On behalf of the landowner, Karen and Ed Pallme, please find attached our complete application for a Special Use Permit for a 5.0 megawatt, alternating current (MWac) community solar project, known as "Pallme Farm Solar". The project is located on an approximately 30-acre site, parcel ID 02-09-200-002, with road and cable access through the adjoining parcel to the north (parcel ID 02-04-400-009). This community distributed generation solar project has been developed to meet the directives of the Illinois renewable energy targets.

The solar project is being developed pursuant Kane County's solar energy ordinance and special use regulations, and will meet any and all applicable requirements of the County's land use ordinances, as well as applicable state and federal regulations. All required application material is included here in hard copy format. The complete application package begins with a Project Narrative summary of the proposed project, followed by a series of appendices with more detailed and technical information.

Building permits and any other additional required approvals will be obtained before starting construction, and will include detailed design as well as any other additional material as required by the County.

We appreciate the consideration and look forward to a successful project.

Sincerely,

A handwritten signature in black ink that reads "Andy Melka".

Andy Melka  
Director, Development  
312-972-5055  
[andy@horizonpow.com](mailto:andy@horizonpow.com)

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## **List of Appendices:**

- Appendix A – Geometric Site Plan
- Appendix B – Site Survey
- Appendix C – Structural Certificate
- Appendix D – Example Equipment Data Sheets
- Appendix E – Township Road Commissioner Approval
- Appendix F – Huntley Fire Protection District Comments
- Appendix G – Landscaping Plan
- Appendix H – Noise Analysis
- Appendix I – Wetland Delineation Report
- Appendix J – FEMA Map
- Appendix K – Kane-DuPage Soil & Water Conservation District NRI Report
- Appendix L – Drain Tile Information
- Appendix M – Illinois SHPO Response Letter
- Appendix N – Illinois DNR Species Consultation
- Appendix O – US Fish & Wildlife Service Information for Planning and Consultation Tool Results
- Appendix P – Decommissioning Plan and Preliminary Cost Estimate
- Appendix Q – Decommissioning Bond Draft



## Project Narrative:

### Key Contacts:

- **Property Owner:** Karen and Edward Pallme, 3307 Vermont Ln, Woodstock IL 60098
- **Applicant and Facility/Project Owner:** ILSolar08 LLC, an Illinois limited liability company
- **Developer:** Horizon Solar Power LLC

### Purpose:

This project is being developed as a community solar project, under the Illinois Shines initiative. Community solar projects allow utility customers to subscribe to a solar project and get bill credits for the amount of electricity their portion of the solar project produces. In addition, this community-sized, distributed-generation project will add reliability to the local grid and can help neighboring electrical customers by reducing the likelihood of brown-outs or black-outs.

### Setting:

The site for the proposed solar project is currently farmland. The parcel is zoned F and is surrounded by other F zoning, PUD, and the Village of Huntley. The site is ideal for a solar project because it is relatively flat, and is well-exposed to sunlight. Two large Amazon Distribution Centers are adjacent to the site to the west.

### Site Plan, Major Equipment:

A preliminary site plan for the proposed community solar project, including civil drawings, is attached hereto as **Appendix A**. A survey for the property is included as **Appendix B**. The solar project will be comprised of three types of major equipment: solar modules (panels), support racking for the panels, and electrical inverters:

Solar photovoltaic (PV) modules (also known as solar panels) are made of thin silicon cells, aluminum conductors and frames, glass surface, and plastic back sheet. The silicon cells convert the rays of the sun into an electric current, which runs through the electrical conductors into the larger system. The glass serves to protect the panels from weather, while the plastic back sheet holds together the cells, conductors, and string wiring.

The racking system supports the modules above the ground. The solar modules will be mounted on horizontal supports, attached to vertical steel posts driven or screwed into the ground at regular intervals. This method minimizes excavation and concrete foundations. Kimley-Horn prepared a letter certifying that the local soils are appropriate for the project, which is attached as **Appendix C**.

Electrical inverters will be attached to support structures at the end of the rows of the solar array. Inverters convert direct-current (DC) electricity created at each module to alternating-current (AC) grid

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power. The inverters have cooling fans, which make minimal noise, audible only within a few dozen feet of the inverters themselves. Specific sound ratings are included in the equipment data sheets, discussed below.

Example equipment data sheets for representative major equipment have been attached hereto as **Appendix D**. Final selection of equipment will be done prior to applying for a building permit. Revisions to the site plan to accommodate final equipment selection may be necessary but will remain within the site boundary. Any revisions will maintain similar physical characteristics, will not increase the land included in the project, and will fully comply with all setbacks and height restrictions and any other legal requirements.

### **Interconnection and Other Equipment:**

The solar project will have small transformers, which will increase the voltage to match the ComEd distribution system voltage. A separate meter and various other electrical equipment will be located near the transformers. An electrical feeder extension (cables) will extend from the ComEd lines along Powers Rd into the site, where the solar project will interconnect with the existing distribution system. The interconnection facilities will be made up of poles, control boxes, meters, switches, and other related equipment. Final design and location of the ComEd interconnect facilities will be dictated by ComEd, and will be specified by ComEd prior to application for building permits.

### **Access:**

The project will be accessed via a new gravel driveway from Powers Rd, following an old entrance and path through the northern parcel. Rutland Township Highway Commissioner John Alesi reviewed and approved the access road location (**Appendix E**). The road will enter the solar site on the northeast corner of the parcel and extend south before turning west into the middle of the solar array, as shown on the site plan (Appendix A). The project area will be fenced and gated to prevent unauthorized access. Fencing will be woven-wire fencing, also known as “deer fencing” or “agricultural fencing. No regular visitation of the site other than the operations and maintenance team is proposed.

### **Fire District Review:**

Fire Marshal Joseph Buschbacher of the Huntley Fire Protection District reviewed the conceptual plans and provided preliminary comments on December 5<sup>th</sup>, 2025, attached as **Appendix F**. Marshal Buschbacher approved the access location and requested that the access road (i) be twenty feet (20') in width, (ii) have a minimum turning radius of fifty feet (50'), and (iii) be able to support 75,000 pound vehicle. Those requests have been incorporated into the Site Plan.

### **Hours of Operation, Employees, Site Traffic, Parking:**

The facility will passively convert sunlight to electricity during daytime hours. No permanent employees will be on site on a regular basis. Operations & Maintenance personnel are anticipated to be at the site

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every few months to perform scheduled maintenance, vegetation control, and to response to any unscheduled maintenance or outage issues.

### **Screening, Landscaping, and Ground Cover:**

The project will install native evergreen trees as landscaping and visual screening from the neighboring residences, as shown on **Appendix G**. The landscaping will be planted along the south and northeast sides of the project, where some residences might have some visibility of the project. The screening will encompass a staggered double row of evergreens, with trees spaced twenty feet (20') apart within the rows ten feet (10') apart. A row of decorative shrubs (e.g., cardinal dogwood or similar) will be planted between the tree screening and the residences for additional visual interest.

The land under the panels will be planted with low-growth, native vegetation that will allow water infiltration and reduce run-off rates relative to open farmland. The vegetation mix will be pollinator friendly, and will enhance the biodiversity of the area and provide additional habitat for a number of native fauna, including bees, butterflies and other important pollinating species. Growth of the vegetation will initially be controlled by regular mowing, as needed. Mowing will be needed less often as the native habitat establishes itself. Herbicide and other weed control measures will only be used as necessary to keep the site in well-kempt condition, and to support the establishment of the native pollinator habitat.

### **No Public Services Required:**

Solar projects do not require sewer, septic, city water, waste management, or any additional local services.

### **Noise Analysis:**

Kimley-Horn performed a noise analysis of the site, attached as **Appendix H**, which found that the project will be in full compliance with the Illinois Pollution Control Board noise standards. No perceptible noise is expected for offsite residences.

### **Water Resources:**

No grading is planned to be performed other than minor grading as necessary to build the access road and equipment pads and to construct the retention basin. Should additional grading be required upon final equipment selection and final engineering, the project will utilize engineered drainage controls and obtain all necessary permits prior to such activity.

Davey Resource Group performed a wetland delineation of the site and found no wetlands. A known pond was located outside of the solar array parcel, and an ephemeral stream was located coming from that pond and extending a few dozen feet into the solar array parcel. A twenty-foot (20') buffer was



utilized around that portion of the ephemeral stream that is on the solar array parcel. The Delineation Report is attached as **Appendix J**.

No FEMA Floodplains are mapped within the boundaries of the solar project (**Appendix J**).

The Kane-DuPage Soil & Water Conservation District prepared a Natural Resources Inventory report for the project, which is attached as **Appendix K**.

#### **Drain Tile:**

No drain tile is known to exist within the solar project area (see Drain Tile Info attached as **Appendix L**). Applicant will perform a drain tile investigation if required by Kane County prior to application for a building permit.

#### **Historical Resources:**

The Illinois State Historical Preservation Office (SHPO) conducted a review of the site (**Appendix M**), and concluded that, "No historic property were identified... [no] known archaeological sites [exist] within the area of potential direct effects. ... Accordingly, this project is **EXEMPT** from archaeological survey requests...".

#### **Illinois Department of Natural Resources Consultation:**

The IDNR was consulted through EcoCAT regarding the presence of sensitive species onsite and nearby Illinois Natural Areas Inventory lands and Illinois Nature Preserves Commission Land. Their conclusion was "...that adverse effects are unlikely.... Consultation on the part of the Department is closed, unless the applicant desires additional information or advice related to this proposal". Two state-endangered species have potential to be located near the project area: Blanding's turtle and Swainson's hawk. Adverse impacts to those species are unlikely. The Applicant will follow the recommendations for construction operations during the Blanding's turtle's active season. The IDNR Report is attached as **Appendix N**.

#### **US Fish & Wildlife Natural Resources Consultation:**

The US Fish & Wildlife Service was consulted through their Information for Planning and Consultation (IPaC) tool. The IPaC tool confirmed that no critical habitats exist. No impact on covered species is expected. The results of the IPaC tool are attached as **Appendix O**.

#### **Interconnection Status:**

The project has applied for interconnection with ComEd. ComEd has completed the Feasibility Study and System Impact Study for the project, showing that the project is acceptable in this location. An Interconnection Agreement will be executed with ComEd when appropriate.



### **Life of Project – Operations and Maintenance:**

Upon approval of the Special Use Permit, several steps remain prior to the commercial operation of the community solar project, including final design and production modeling, final investment decision, hiring of the project's construction firm, and applying for a local building permit, among many others. Once operational, the life of the community solar gardens is expected to be at least 35 years, and may be extended at that time, depending on a variety of factors.

### **Decommissioning:**

A Decommissioning Plan has been prepared for the project, and is attached as **Appendix P**. An estimate of the cost of implementing the Decommissioning Plan has been prepared by Kimely-Horn, and is attached as **Appendix Q**.



## Appendix A – Geometric Site Plan

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## Appendix B – Site Survey

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## Appendix C – Structural Certificate

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## Appendix D – Example Equipment Technical Data Sheets

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## Appendix E – Township Road Commissioner Approval

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## **Appendix F – Huntley Fire Protection District Comments**

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## Appendix G – Landscaping Plan

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## Appendix H – Noise Analysis

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## Appendix I – Wetland Delineation Report

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## Appendix J – FEMA Map

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## **Appendix K – Kane-DuPage Soil & Water Conservation District NRI Report**

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## Appendix L – Drain Tile Information

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## Appendix M – SHPO Response Letter

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## Appendix N – Illinois DNR EcoCAT Report

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## Appendix O – US Fish & Wildlife IUPAC Report

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## **Appendix P – Decommissioning Plan and Cost Estimate**

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