HORIZON
SOLAR POWER

Application for Special Use Permit
for
Hartmann Farm Solar

Submitted to Kane County, IL

by

Dale F. and Jennifer F. Hartmann (Landowner)
&
Horizon Solar Power, LLC (Developer)
&
ILSolar05 LLC (Project Owner)

August 28th, 2023

Kane County
c/o Keith Berkhout, Zoning Planner
719 Batavia Avenue - Bldg A, 4th Floor
Geneva IL 60134

(with an email copy to: BerkhoutKeith@co.kane.il.us)

To Kane County,

On behalf of the landowner, Dale and Jennifer Hartmann, please find attached our complete application for a Special Use Permit for a 5.0 megawatt, alternating current (MWac) community solar project, known as "Hartmann Farm Solar". The project is located on an approximately 41.5-acre site within a 52.8 acre property, parcel ID 07-13-200-014. 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,

Andy Melka
Director, Development
312-972-5055
andy@horizonpow.com

List of Appendices:

Appendix A – Site Plan (including Landscaping Plan)
Appendix B – Site Survey
Appendix C – Example Equipment Data Sheets
Appendix D – Wetland Letter of No-Finding
Appendix E – Kane-DuPage Soil & Water Conservation District Land Use Opinion Report
Appendix F – Illinois DNR Species Consultation
Appendix G – US Fish & Wildlife Service Information for Planning and Consultation Tool Results
Appendix H – Decommissioning Plan and Preliminary Cost Estimate

Project Narrative:

Overall Parcel Detail:

- **PINs**: 07-13-200-014
- **Owner:** Dale and Jennifer Hartmann, 7N425 Sauber Rd, Maple Park IL 60151
- **Site Access** will be via a new driveway entrance from IC Trail.
- **Legal Description of the Project Area**:

  The western 1050' of the below described property:

  THAT PART OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 13, LYING NORTHERLY OF THE NORTHERLY LINE OF THE RIGHT OF WAY OF THE CHICAGO GREAT WESTERN RAILWAY COMPANY AND SOUTHERLY OF THE CENTERLINE OF IC TRAIL.

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. The site is ideal for a solar project because it is relatively flat, and is well-exposed to sunlight.

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.

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 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 C.** 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 change 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 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 IC Trail 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 along the south side of the parcel as shown on the site plan (Appendix A). The project area will be fenced and gated to prevent unauthorized access. Fencing will be chain link, woven-wire fencing (also known as “deer fencing” or “agricultural fencing), or similar. No regular visitation of the site other than the landowner and operations and maintenance team is proposed.

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 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. The landscaping will be planted along the east side of the project, as well as in the northwest corner, as indicated on the landscaping plans as part of Appendix A.

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.

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 reviewed the site for the presence of wetlands, and detected no signs. The no-finding report is attached as **Appendix D**.

The Kane-DuPage Soil & Water Conservation District prepared a Land Use Opinion report for the project, which is attached as **Appendix E.**

Illinois Department of Natural Resources Consultation:

The IDNR was consulted through EcoCAT regarding the presence of sensitive species onsite. Their conclusion was "…that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated." The Report and letter from IDNR are attached as **Appendix F**.

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 G**.

Interconnection Status:

The project has applied for interconnection with ComEd. ComEd has completed all of their studies, and the project and ComEd have entered into an interconnection agreement.

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 H**. The Decommissioning Plan will be updated once the project design is finalized, based on the final site plan, selected equipment, salvage value and engineering. The Applicant will provide an updated cost estimate along with any required financial security prior to applying for a building permit, as described in more detail in Appendix H.

Appendix A – Site Plan and Electrical Diagram

Appendix B – Site Survey

Appendix C – Example Equipment Technical Data Sheets

Appendix D – Wetland Letter of "No Finding"

Appendix E – Kane-DuPage Soil & Water Conservation District Land Use Opinion Report

Appendix F – Illinois DNR Consultation

Appendix G – US Fish & Wildlife Service Information for Planning and Consultation Tool Results

Appendix H – Decommissioning Plan