

**PROJECT NARRATIVE**  
**Litchfield Solar, LLC**  
**Montgomery County, IL**  
**Montgomery County Solar Farm Application Submission**  
**March 2025**

**PROJECT APPLICANT / SPONSOR**

Litchfield Solar, LLC  
c/o Carson Power  
110 William Street, 24th Floor, New York, NY 10038

**PROPERTY OWNER AND PROJECT ADDRESS**

- **Project Address:** South of County Road 1000 N on Route 66, Litchfield, IL 62056, Montgomery County
- **Parcel Owners:** Steven and Pamela Grosenheider

**INTRODUCTION**

Litchfield Solar, LLC ("Litchfield Solar"), an entity of Carson Power ("Carson" or the "Applicant"), hereby submits this application for approval to construct, operate, and maintain the Litchfield Solar, LLC project throughout its useful life. Litchfield Solar is a 5 MW AC, ground-mounted community solar array (the "Project") located on parcels 15-17-200-010 and 15-17-100-004 in unincorporated Montgomery County, Illinois (the "Parcel"). The proposed Project will occupy approximately 17 acres of a 23-acre Parcel.

The exhibits and information contained in this application are based on preliminary desktop due diligence and field analysis. If approved for a Special Use Permit, the Applicant will prepare final design documents and obtain all necessary permits before construction. The information provided is subject to change based on final solar array design, coordination with Ameren, and procurement of Project equipment.

**PROJECT DESCRIPTION**

The proposal includes the construction of one (1) 5 MW AC ground-mounted community solar array on a 23-acre parcel. The Project will occupy approximately 17 acres and is a permitted use in Montgomery County per the Ordinance for Solar Energy Farm and Solar Garden Installations. Site control has been secured through an Option to Purchase Agreement, and the Project's expected lifespan is approximately 30-40 years.

The Project Area is currently cultivated cropland, surrounded by additional cultivated cropland. If approved, the Project will be a ground-mounted commercial solar energy facility consisting of photovoltaic (PV) modules, a racking system, inverters, and underground electrical conduits connecting PV array blocks to inverters. Access will be provided by a gated entrance and a gravel driveway, as shown in the Site Plans. The final design will be verified with geotechnical engineering recommendations. All site improvements will be enclosed by a fixed-knot farm security fence that contains wooden posts and a 6-inch wildlife friendly gap at the bottom.

The Point of Interconnection (POI) to the electrical grid will utilize an existing utility pole on the east side of Route 66. The 3-phase lines will be upgraded from the substation to the POI per the Ameren Interconnection Study. The POI includes nine (9) utility poles within the Project parcel and overhead wiring along a proposed 15-foot-wide access road. All electrical components will comply with the National Electric Code and be UL listed or meet equivalent safety standards.

The Project will contribute to the community's welfare by significantly increasing property tax revenue, decreasing the price of electricity bills to subscribers, creating new local jobs, and injecting capital into the local economy. Once operational, the solar farm will passively generate renewable energy year-round. The site and equipment will be designed, maintained, and inspected to ensure safety and security. Maintenance activities will be minimal, with occasional service for inverters and transformers. Solar panels will be monitored remotely, and no significant increase in traffic is anticipated during operation.

A vegetation maintenance program will be implemented within the fenced boundary and buffer areas to prevent panel shading and maintain aesthetics. After construction and the establishment of stabilized vegetation, vegetative management will continue as needed based on weather and moisture conditions. This schedule will be maintained until the implementation of the Decommissioning Plan.

## **DESIGN STANDARDS**

The Project will adhere to the following design standards per the Montgomery County Ordinance for Solar Energy Farm and Solar Garden Installations:

- **Approved Solar Components:** All electric solar energy components will be UL-listed or have equivalent approval.
- **Building Code Compliance:** The Project will comply with county building codes and the International Building Code.
- **Electrical Code Compliance:** All photovoltaic systems will comply with the National Electric Code.
- **Plumbing Code Compliance:** Not applicable; however, any construction items requiring compliance will adhere to regulations.
- **Energy Code Compliance:** The Project will comply with the Illinois State Energy Code.
- **Drainage Law Compliance:** Adherence to SWPPP, site plans, and NPDES requirements ensures compliance with all drainage laws. A full drain tile survey has been commissioned.
- **Utility Notification:** The interconnection of Litchfield Solar has been approved by Ameren via an interconnection study. The interconnection contract is being finalized.
- **Agricultural Protection:** Compliance with the Agricultural Impact Mitigation Act (AIMA) (505 ILCS 147). Litchfield Solar, LLC has executed a standard AIMA with the State Department of Agriculture.
- **Endangered Species & Wetlands Compliance:** A wetland delineation has been submitted to the U.S. Army Corps of Engineers, and a "No Permit Required" letter has been obtained. IDNR consultation has been completed, and the EcoCat consultation has been terminated. Required documentation is included in this application package.
- **Stormwater & NPDES Compliance:** The SWPPP is included in the application package. NPDES will be submitted before construction begins.

## **REQUIREMENTS FOR A SOLAR FARM**

- **Ground Cover and Buffer Areas:** A solar seed mix will ensure full vegetative cover. Pollinator-friendly seed mixes can be used around the perimeter. A managed vegetative buffer is shown on the Site Plan to screen the array from Route 66.

- **Foundations:** A qualified engineer will certify the foundation and design based on a geotechnical study.
- **Regulatory Compliance:** The Project will comply with all applicable local, state, and federal standards, including Illinois Public Act 099-0906 and the National Electric Code.
- **Power and Communication Lines:** Lines will be buried underground except where technical or physical constraints require above-ground installation, as demonstrated in the Site Plan. JULIE will be contacted before excavation.
- **Setbacks:** The Project adheres to 50-foot setbacks from adjacent properties and rights-of-way. Solar panels are 150 feet from any residence or occupied building.
- **Aviation Protection:** A glare analysis memo and FAA Letter of No Hazard Determination have been submitted.
- **Glare Mitigation:** Vegetative screening will reduce glare. A Glare Memo is included in the application package.
- **Safety Fencing and Gates:** The solar array will be enclosed by 7-foot-tall woven-knot fencing with gates.
- **Transportation Access and DOT Permits:** A haul route map has been provided, and consultation with IDOT is underway for entrance permitting.
- **Decommissioning Plan and Estimate:** The applicant has included a decommissioning plan in the site plan, following the Illinois Department of Agriculture's standard solar AIMA. The executed AIMA for this proposed project, along with a detailed estimate of decommissioning costs, has been provided in the application materials. To ensure decommissioning funds are secured, the applicant is offering a surety bond of \$190,489.36, consistent with the submitted cost estimate and the requirements of the AIMA.

## **CONCLUSION**

The Litchfield Solar, LLC Project meets all Montgomery County and State of Illinois requirements, and qualifies for approval as a Commercial Solar Energy Facility. Litchfield Solar, LLC seeks approval transferable upon the potential sale of Litchfield Solar, LLC by Carson Power.