CHAPTER 725

Solar Farms.

The following provisions shall apply to all solar farms in Carroll County, IL. A Solar Farm is defined as a power station using photovoltaic modules and inverters for utility electricity generation equal to or in excess of 100 kilowatts alternating current (AC). Solar Farms shall be permitted in the Agricultural (Ag-1) District as a Special Use, in accordance with the following minimal regulations and design standards set forth herein.

Section 1. Design standards. The design standards and bulk regulations listed in the Agricultural (Ag-1) District for setbacks, lot size, lot coverage, lot area, height, and signage shall be suspended for all solar farms and the following regulations shall apply instead. All other design standards and bulk regulations of Chapter 700 Zoning shall apply.

A. Foundations. The project’s engineer or another qualified engineer shall certify that the foundation and/or design of the solar panels is within accepted professional standards, given local soil and climate conditions.

B. Standards and codes. All solar farms shall be in compliance with any applicable local, state and federal regulatory standards, Illinois Public Act 099-0906 and the National Electric Code as amended. The installation of new solar energy generation facilities shall be installed or supervised by a qualified person as defined by Illinois Public Act 099-0906 (known as the "Future Energy Jobs Act").

C. Power and communications lines. Power and communication lines running between arrays of solar panels and to the point of interconnection shall be buried underground, except where technical or physical constraints make it more practicable to install above ground. Exemptions may be given in instances where shallow bedrock, watercourses, or other elements of natural landscape interfere with the ability to bury lines, or the interconnecting utility requires overhead infrastructure. JULIE shall be contacted before digging or excavating begins.

D. Minimum lot size. No solar farm shall be erected on any lot less than five (5) acres in size.

E. Height. Systems, equipment and structures shall not exceed thirty (30) feet in height when mounted at maximum tilt. Excluded from this height requirement, however, are electric transmission lines, communications poles, and utility poles.

F. Setbacks. Ground mounted solar energy systems as part of a solar farm shall have a setback for all equipment (excluding fences) of a minimum of 60 feet from center of a township Rd., 100 feet from County or State Rd. and 20 feet from all other property
lines, with the exception of residential property lines. A solar energy system shall be setback 100 feet for residentially zoned lots and existing residential properties, with the setback distance to be measured from the edge of the solar equipment to the property line of residentially zoned lots or existing residential properties. The Carroll County Board may grant a variance to such setback requirement if the proposed or existing buffer is sufficient to screen the project from view from adjoining property or public rights-of-way. Earth berms and other topographical features and existing wooded areas may be acceptable forms of screening. The Zoning Board of Appeals shall conduct a public hearing on any variance requests and send their recommendations to the county board.

G. **Fencing.** The solar energy system shall be fully enclosed and secured by a locked fence with a minimum height of six feet.

H. **Lighting.** If lighting is provided at the site, lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel or roadways.

I. **Noise.** Noise levels measured at the property line shall not exceed 50 decibels when located adjacent to an existing residence or residential district.

J. **Performance standards.** All solar power plants must conform to the performance standards as set forth by any local, state, federal regulatory standards, Illinois Public Act 099-0906 or the National Electric Code as amended.

K. **Signage.** An appropriate warning sign shall be provided at the entrance to the facility and along each perimeter to the solar farm project. The sign at the entrance to the facility shall include the facilities 911 address and a 24-hour emergency contact number.

L. **Outdoor Storage.** Only the outdoor storage of materials, vehicles and equipment that directly support the operation and maintenance of the solar farm shall be allowed. During construction, there may be materials, vehicles and equipment on the site(s) that do not support the operation or maintenance of the solar farm; or, do not comply with the zoning district. All materials, vehicles or equipment on the site that does not directly support the operation and maintenance of the solar farm; or, does not comply with the zoning district will be removed at the completion of construction so as to be in compliance with this section.

M. **Aviation Protection.** For solar energy systems located within one thousand feet (1000) feet of an airport, the applicant shall complete and provide the results of the Solar Glaze Hazard Analysis Tool (SGHAT) for the airport traffic control tower cab and final approach paths, consistent with the Interim Policy, FAA Review of Solar Energy Projects on Federal Obligated Airports, or most recent version adopted by the FAA.
**Section 2. Application requirements.** Due to the unique nature and special requirements of solar power plants and their potential impacts to adjoining properties and government services, solar power plants shall be required to submit and obtain approval on the following items in addition to any requirements specified in the special use section of the County Code or any special conditions required by the Carroll County Board or Zoning Administrator.

A. **Site plan maps with existing conditions showing the following:**
   
i. Existing property lines and property lines extending 100 feet from the exterior boundaries of the solar project, including the names of adjacent property owners and current use of those properties.
   
ii. Existing adjacent public and private roads, showing widths of the roads and any associated easements.
   
iii. When applicable, the location and size of any abandoned wells or sewage/septic systems.
   
iv. When applicable, existing buildings and any impervious surfaces.
   
v. A contour map identifying topography of the area.
   
vi. Existing vegetation/Land Use (list type and percent of coverage: i.e. cropland/plowed fields, grassland, wooded areas etc.)
   
vii. When applicable any waterways, watercourses, lakes, public water and wetlands identifying surface water drainage patterns.
   
viii. When applicable, a copy of the current FEMA FIRM map that shows the subject property.
   
ix. Mapped soils according to the Carroll County Soil Survey System.
   
x. When applicable, the location of any subsurface drainage tiles.

B. **Plan of proposed conditions:**
   
i. Location, number and spacing of solar panels.
   
ii. Location of access roads and access points.
   
iii. Planned location of underground or overhead electric lines connecting the solar farm to the intended point of interconnection.
iv. When applicable, new electrical equipment that is to be the connection point for the solar farm.

v. Sketch elevation of the premises accurately depicting proposed solar energy conversion system and its relationship to structure on adjacent land.

vi. Landscape and grass control plan. The applicant shall propose and implement a landscaping and grass plan. The plan shall take into account the type(s) of vegetation to be planted and the scheduled maintenance of vegetation. The plan shall encompass both the inside and outside of the fenced areas for entire property. The operating company during the operation of the solar farm must maintain and adhere to the control plan.

C. Informational items to be included:

i. A description of the method of connecting the array to a building, substation, or other utility infrastructure.

ii. At the time of applying for the special use application a written statement shall be provided that the applicant is in the queue to acquire an interconnect agreement with a power provider.

D. Decommission plan: A plan shall be required to ensure that facilities are properly removed after their useful life. Decommissioning of solar panels must occur in the event the plant is not in use for 12 consecutive months, at this time the operating company and or land owner will have twelve (12) months to complete the decommission plan or the county will take the necessary steps to force decommission. The plan shall include provisions for removal of all structures (including equipment, fencing, roads and foundations), restoration of soil and vegetation and a plan ensuring financial resources will be available to fully decommission the site. Disposal of structure and/or foundations shall meet the provisions and regulations of the Illinois Environmental Protection Agency or the United States Environmental Protection Agency.

The county is granted the right to seek injunctive relief to effect and complete decommissioning, as well as to seek reimbursement from applicant or applicant successor for decommissioning costs against any real estate owned by applicant or applicant’s successor, or in which they have an interest and to take all steps allowed by law to enforce said lien.

E. Liability insurance: The owner operator of the solar farm shall obtain and hold a general liability policy covering bodily injury and property damage and name Carroll County as an additional insured with limits of at least two million dollars ($2,000,000.00) per occurrence and five million dollars ($5,000,000.00) in the aggregate with a
deductible of no more than five thousand dollars ($5,000.00). The applicant/owner must provide proof of insurance to the Carroll County Zoning Office prior to construction.

F. Other: The county reserves the right to require additional information or components to the plan as the county deems necessary to ensure that an adequate proposal is in place. In the event that the State of Illinois enacts a law with regard to solar farms, such as AIMA’s, the stricter requirement(s) shall apply.

**Section 3 Fees, Signs & Enforcement:**

A. Fees to apply for a special use permit will be compatible with Chapter 360-3 A10. No solar farm building permit application shall be approved until the filing fee of $1,000.00, plus $.50 per solar panel array/module is paid in full.

B. All signage will comply in accordance with the regulations set forth in Carroll County Chapter 705 Signs and the applicable sections of this chapter, Section 2 “Application Requirements”, subsection K “Signage”.

C. The Zoning Administrator shall enforce the provisions of this ordinance through an inspection of the solar farm as needed. The Zoning Administrator may enter the premises for such inspections if needed, but only after coordinating a reasonable time to meet with the operator/owner of the facility. Any person, firm or cooperation who violates, disobeys, omits, neglects, refuses to comply with, or resists enforcement of any of the provisions of this section may face fines of not more than $750.00 for each offense per week.