Section 7.17 Ground Mounted Solar Energy Equipment

7.17.1 Purpose

It is the purpose of this ordinance to regulate the siting and installation of ground mounted solar energy equipment. The promotion of safe, effective, and efficient use of ground mounted solar energy equipment will be balanced against the need to preserve and protect public health and safety.

7.17.2 Types of Ground Mounted Solar Energy Equipment

1. Solar Private

    a. Solar Private is a permitted accessory use in any zoning district and must abide by the bulk regulations, density and dimensional standards of the underlying zoning district in which it is located. All private solar requires a building permit prior to the initiation of construction.

2. Solar Energy Generation Facility

    a. Solar Energy Generation Facility is permitted as a special use in the agricultural and industrial zoning districts and shall meet the requirements set forth in Section 7.17.3 ("Standards for a Solar Energy Generation Facility") through Section 7.17.5 ("Decommissioning Plan").

7.17.3 Standards for a Solar Energy Generation Facility

1. Setbacks

    a. All solar energy equipment and accessory structures of the facility, excluding perimeter fencing, must comply with road setbacks established in the underlying zoning district. In agricultural zoning districts, the setback for non-residential structures shall apply.

    b. All solar energy equipment and accessory structures of the facility, excluding perimeter fencing, must comply with side and rear setbacks established in the underlying zoning district for principal structures.

        1. In the case of a solar energy generation facility to be built on more than one parcel and the parcels are abutting, a zero (0) side or rear setback shall be permitted to the property line in common with the abutting parcel(s).

    c. The horizontal separation distance from the solar energy generation facility to the nearest principal residential dwelling shall be at least seventy-five (75) feet. If the facility is to be located on a parcel with a principal residential dwelling, this seventy-five (75) foot setback shall not apply to the principal residential dwelling.

2. Height. All solar collectors, transformers, equipment or maintenance structures shall comply with the height restriction of the underlying zoning district.

3. Minimum Conditions for Special Use Permit

    a. Design and Installation. Solar collectors shall be designed and located to avoid glare or reflection toward any inhabited buildings on adjacent parcels. Solar collectors shall be designed and located to avoid glare or reflection toward any adjacent roadways and shall not interfere with traffic or create a traffic safety hazard.

    b. Lighting. Lighting shall be limited to the extent required for security and safety purposes and to meet applicable federal, state, or local requirements. Except for federally required lighting, lighting shall be reasonably shielded from adjacent properties and, where feasible, directed downward to reduce light pollution.

    c. Security Fencing. Facility equipment and structures shall be fully enclosed and secured by a perimeter fence with a height of six (6) to eight (8) feet. Lock boxes and keys shall be provided at locked entrances for emergency personnel.

    d. Warning Signage. A visible warning sign of "High Voltage" shall be posted at all points of site ingress and egress and along the perimeter fence of the facility, at a maximum of three hundred (300) feet apart. A sign that includes the facility's 911 address and 24-hour emergency contact number shall be posted near all entrances to the facility.

    e. Utility Connection. The applicant shall submit with the special use application a copy of a letter from the electric utility company confirming the review of the application for interconnection has started.

    f. Fire Safety. It is the responsibility of the applicant to coordinate with the local fire protection district. The applicant shall submit with the special use application an approval letter from the local fire protection district.

    g. Roads. Any roads that will be used for construction purposes and egress or ingress shall be identified and approved by the road jurisdiction. All applicable road and bridge weight limits shall be met during construction and maintenance. All applicable permits shall be acquired from the road jurisdiction prior to start of construction. The applicant shall submit with the special use application an approval letter from the road jurisdiction(s).

    h. Endangered Species and Wetlands. Applicant shall seek natural resource consultation with the Illinois Department of Natural Resources (IDNR). The applicant shall submit with the special use application the results of the IDNR EcoCAT consultation. The cost of the EcoCAT consultation shall be paid by the applicant.

i. Compliance with Additional Regulations. It shall be the responsibility of the applicant to coordinate with the FAA or other applicable federal or state authority to attain any additional required approval for the installation of a solar energy generation facility. The applicant shall submit with the special use application an approval letter from any federal or state authority requiring permit or approval.

j. Special Use Fees. At the time of filing the special use application, the applicant shall pay the filing fee as set forth in Chapter 20 of the Peoria County Code, Appendix A.

4. Minimum Conditions For a Building Permit

a. Building Permit. All solar energy generation facilities require a building permit prior to the initiation of construction. Three full sets of construction plans that conform to the manufacturer's standards and to the officially adopted codes of Peoria County shall be submitted with the building permit application. Said plans shall be certified by an Illinois licensed professional engineer.

b. Stormwater and Erosion Control. All solar energy generation facilities must meet the requirements of Section 3.12 ("General Erosion and Sediment Control Permits"), Section 3.13 ("Erosion, Sediment, and Storm Water Control Permits"), and Section 7.13 ("Erosion, Sediment, and Stormwater Control").

c. Installation Certification. An Illinois licensed professional engineer shall certify that the construction and installation of the solar energy generation facility meets or exceeds the manufacturer's construction and installation standards and the officially adopted codes of Peoria County.

7.17.4 Maintenance and Operation

Responsibility. The owner of the solar energy generation facility shall maintain facility grounds. Such maintenance shall include all actions necessary to keep the facility grounds free of litter and debris. The owner shall keep all fences maintained in good repair.

7.17.5 Decommissioning Plan

1. The solar energy generation facility shall be required to have a decommissioning plan to ensure it is properly removed upon the end of the project life or facility abandonment. For purposes of this section, "facility abandonment" shall mean when no electricity is generated by the facility for a consecutive period of two (2) years or when the owner and/or operator of the solar energy generation facility has stated in writing to the Zoning Administrator that the owner and/or operator intends to abandon, vacate, or cease solar energy creation operations indefinitely on a specified solar energy generation facility. The decommissioning plan shall state how the facility will be decommissioned. Decommissioning shall include: removal of all structures (including solar energy equipment and fencing) and debris to a depth of four (4) feet, restoration of the soil, and restoration of vegetation within six (6) months of the end of project life or facility

abandonment. The owner shall restore the land to a condition reasonably similar to its condition before the development of the solar energy generation facility, including replacement of top soil, which may have been removed or eroded, and replacement of trees. A decommissioning plan shall be submitted and approved prior to the issuance of the building permit.

2. Financial Security. Appropriate means of financial security shall be required as part of the decommissioning plan. The security shall be in the name of Peoria County for one hundred percent (100%) of the estimated cost of decommissioning. The estimated cost shall not include any projected salvage value of the solar energy equipment and other used equipment. The estimated cost shall be prepared by an Illinois licensed professional engineer.

    a. Security may be in the form of one of the following:

        1. Irrevocable Letter of Credit;

        2. Continuous Surety Bond;

        3. Cash Escrow Account; or

        4. Any other means deemed acceptable by the Zoning Administrator.

3. Agreement. The decommissioning plan shall also include an agreement between the applicant and the County which states:

    a. Financial security must remain valid through the life of the project. An updated decommissioning plan including estimated costs prepared by an Illinois licensed professional engineer and financial security must be submitted to the Zoning Administrator every four (4) years;

    b. The County shall have access to the financial security funds for the expressed purpose of completing decommissioning if decommissioning is not completed by the owner within six (6) months of the end of project life or facility abandonment;

    c. The County is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning; and

    d. The County is granted the right to seek injunctive relief to effect or complete decommissioning, as well as the County's right to seek reimbursement from owner or owner's successor for decommissioning costs which exceed the financial security and to file a lien against any real estate owned by the owner or owner's successor, or in which they have an interest, for the excess amount, and to take all steps allowed by law to enforce said lien.

4. Release of Financial Security. Financial security shall only be released when the Zoning Administrator determines, after inspection, that the conditions of the decommissioning plan have been met.