

# TITLE 7, CHAPTER 7



# TAZEWELL COUNTY SOLAR ENERGY SYSTEMS

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**TITLE 7, CHAPTER 7  
SOLAR ENERGY SYSTEMS**

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**TITLE 7, CHAPTER 7**  
**TAZEWELL COUNTY SOLAR ENERGY SYSTEMS ORDINANCE**

**7 TCC 7-1 (a) Purpose.**

The purpose of this ordinance is to facilitate the construction, installation, and operation of Solar Energy Systems (SES) in Tazewell County in a manner that promotes economic development and ensures the protection of health, safety, and welfare while also avoiding adverse impacts to important areas such as agricultural lands, endangered species habitats, conservation lands, and other sensitive lands. It is the intent of this ordinance to encourage the development of SESs that reduce reliance on foreign and out-of-state energy resources, bolster local economic development and job creation. This ordinance is not intended to abridge safety, health or environmental requirements contained in other applicable codes, standards, or ordinances. The provisions of this ordinance shall not be deemed to nullify any provisions of local, state or federal law.

**7 TCC 7-2 (b) Definitions.**

**ACCESSORY:** As applied to a building, structure, or use, one which is on the same lot with, incidental to and subordinate to the main or principal structure or use and which is used for purposes customarily incidental to the main or principal structure, or the main or principal use.

**BUILDING INTEGRATED PHOTOVOLTAIC SYSTEMS:** A solar energy system that consists of integrating photovoltaic modules into the building structure as the roof or façade and which does not alter the relief of the roof.

**COLLECTIVE SOLAR:** Solar installations owned collectively through subdivision homeowner associations, college student groups, or other similar arrangements.

**COMMERCIAL/LARGE SCALE SOLAR FARM:** A utility scale commercial facility that converts sunlight to electricity, whether by photovoltaics, concentrating solar thermal devices, or various experimental technologies for onsite or offsite use with the primary purpose of selling wholesale or retail generated electricity.

**COMMUNITY SOLAR GARDEN:** A community solar-electric (photovoltaic) array, and is owned by multiple community members that provides retail electric power (or financial proxy for retail power) to multiple households or businesses residing in or located off-site from the location of the solar energy system.

**GROUND MOUNT SOLAR ENERGY SYSTEM:** A solar energy system that is directly installed into the ground and is not attached or affixed to an existing structure.

**NET METERING:** A billing arrangement that allows solar customers to get credit for excess electricity that they generate and deliver back to the grid so that they only pay for their net electricity usage at the end of the month.

**PHOTOVOLTAIC SYSTEM:** A solar energy system that produces electricity by the use of semiconductor devices called photovoltaic cells that generate electricity whenever light strikes them.

**QUALIFIED SOLAR INSTALLER:** A trained and qualified electrical professional who has the skills and knowledge related to the construction and operation of solar electrical equipment and installations and has received safety training on the hazards involved.

**ROOF MOUNT:** A solar energy system in which solar panels are mounted on top of a building roof as either a flush mounted system or as modules fixed to frames which can be tilted toward the south at an optical angle.

**SOLAR ACCESS:** Unobstructed access to direct sunlight on a lot or building through the entire year, including access across adjacent parcel air rights, for the purpose of capturing direct sunlight to operate a solar energy system.

**SOLAR COLLECTOR:** A device, structure or part of a device or structure for which the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical or electrical energy.

**SOLAR ENERGY:** Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

**SOLAR ENERGY SYSTEM (SES):** The components and subsystems required to convert solar energy into electric or thermal energy suitable for use. The area of the system includes all the land inside the perimeter of the system, which extends to any fencing. The term applies, but is not limited to, solar photovoltaic systems, solar thermal systems and solar hot water systems

**SOLAR STORAGE BATTERY/UNIT:** A component of a solar energy device that is used to store solar generated electricity or heat for later use.

**SOLAR THERMAL SYSTEMS:** Solar thermal systems directly heat water or other liquid using sunlight. The heated liquid is used for such purposes as space heating and cooling, domestic hot water and heating pool water.

**7 TCC 7-3 (c) Ground Mount and Roof Mount (SES) Permitted as an Accessory Use.** Ground Mount and Roof Mount (SES) shall be permitted by a building permit in all zoning districts where there is a principal structure. An application shall be submitted to the Community Development Administrator demonstrating compliance with Article 31 of the Tazewell County Zoning in addition to the following requirements below:

(1) Height:

- i. Building or roof mounted solar energy systems shall not exceed the maximum allowed height for principal structures in any zoning district.
- ii. Ground or pole-mounted solar energy systems shall not exceed 20 feet in height which oriented at maximum tilt.
- iii. Ground mounted solar energy systems may be placed in the front yard, but shall not exceed 30 inches above grade.

(2) Setbacks:

- i. Ground mounted solar energy systems shall meet the accessory structure setbacks for the zoning district in which the unit is located.
- ii. Ground mounted solar energy systems shall not extend beyond the side yard or rear yard setback when oriented at minimum design tilt.
- iii. In addition to building setbacks the collector surface and mounting devices for roof mounted systems shall not extend beyond the exterior perimeter of the building on which the systems is mounted or built, unless the collector or

mounting system has been engineered to safely extend beyond the edge, and setback requirements are not violated. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building on a side yard exposure.

- (3) Reflection Angles. Reflection angles for solar collectors shall be oriented such that they do not project glare onto adjacent properties.
- (4) Aviation Protection.
  - i. For solar units located within 500 feet of an airport or within approach zones 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.
- (5) Visibility:
  - i. Solar energy systems shall be located in a manner to reasonably minimize view blockage for surrounding properties and shading of property to the North while still providing adequate solar access for collectors.
- (6) Safety:
  - i. Roof or building mounted solar energy systems, excluding building integrated systems, shall allow for adequate roof access for firefighting purposes to the south facing or flat roof upon which the panels are mounted.
  - ii. Roof or building mounted solar energy systems shall meet the requirements of the Tazewell County Building and Property Maintenance Code.
  - ii. All solar energy systems shall be performed by a qualified solar installer.
  - iii. Any connection to the public utility grid shall be inspected by the appropriate public utility.
  - iv. All solar energy systems shall be maintained and kept in good working order. If it is determined by the Community Development Administrator that a solar energy system is not being maintained, kept in good working order, or is no longer being utilized to perform its intended for 6 consecutive months, the property owner shall be given 30 day notice for removal of the unit and all equipment. If the solar energy system is not removed within 30 days the Community Development Administrator shall issue a Notice of Violation and Notice to Appear before the Tazewell County Hearing Officer as an ordinance violation.
- (7) Approved Solar Components:
  - i. Electric Solar energy system components shall have a UL listing or approved equivalent and solar hot water systems shall have an SRCC rating.
- (8) Restrictions on Solar Energy Systems Limited. Consistent with 765 ILCS 165/ no homeowner's agreement, covenant, common interest community or other contracts

between multiple property owners within a subdivision of unincorporated Tazewell County shall prohibit or restrict homeowners from installing solar energy systems.

**7 TCC 7-4 (d) Building Integrated Systems.** Building Integrated Systems shall be permitted outright in all Zoning Districts but shall meet the requirements of the Tazewell County Building and Property Maintenance Code.

**7 TCC 7-5 (e) Community Solar Gardens (SES).** Development of Community Solar Gardens is permitted by Special Use as a principal use in all zoning districts subject to the following requirements:

- (1) Rooftop Gardens Permitted. Rooftop gardens are permitted in all zoning districts where buildings are permitted.
- (2) Ground Mount Gardens. Ground mount community solar energy systems require a Special Use in all districts.
- (3) Interconnection. An interconnection agreement must be completed with the electric utility in whose service the territory the system is located.
- (4) Dimensional Standards.
  - i. All solar garden related structures in newly platted and existing platted subdivisions shall comply with the principal structure setback, height, and coverage limitations for the district in which the system is located.
- (5) Aviation Protection.
  - i. For solar units located within 500 feet of an airport or within approach zones 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.
- (6) Other Standards.
  - i. Ground Mount Systems shall comply with all required standards for structures in the district in which the system is located.
  - ii. All solar gardens shall comply with the Tazewell County Building and Maintenance Code.
  - iii. All solar gardens shall comply with Article 25 Special Use of the Tazewell County Zoning Code.
  - iv. All solar gardens shall also comply with all other State and Local requirements.

**7 TCC 7-6 (f) Commercial/Large Scale Solar Farm (SES).** Ground Mount solar energy systems that are the primary use of the lot, designed for providing energy to off-site uses or export to the wholesale market require a Special Use in the Agriculture Districts the Conservation District and Industrial Districts and shall comply with Article 25 of the Tazewell County Zoning Code. The following information shall also be submitted as part of the application:

- (1) A site plan with existing conditions showing the following:
  - i. Existing property lines and property lines extending one hundred feet from the exterior boundaries including the names of adjacent property owners and the current use of those properties.
  - ii. Existing public and private roads, showing widths of the road and any associated easements.
  - iii. Location and size of any abandoned wells, sewage treatment systems.
  - iv. Existing buildings and impervious surfaces.
  - v. A contour map showing topography at two (2) foot intervals. A contour map of surrounding properties may also be required.
  - vi. Existing vegetation (list type and percent of coverage: i.e. cropland/plowed fields, grassland, wooded areas, etc.)
  - vii. Any delineated wetland boundaries.
  - viii. A copy of the current FEMA FIRM maps that shows the subject property including the one hundred year floor elevation and any regulated flood protection elevation, if available.
  - ix. Surface water drainage patterns.
  - x. The location of any subsurface drainage tiles.
- (2). A Site Plan of proposed conditions showing the following:
  - i. Location and spacing of the solar panels
  - ii. Location of access roads.
  - iii. Location of underground or overhead electric lines connecting the solar farm to a building, substation or other electric load
  - iv. New electrical equipment other than at the existing building or substation that is to be the connection point for the solar farm.
- (3) Fencing and Weed/Grass Control
  - i. The applicant shall submit an acceptable weed/grass control plan for property inside and outside the fenced area for the entire property. The Operating Company or Successor during the operation of the Solar Farm shall adhere to the weed/grass control plan.
  - ii. Perimeter fencing having a maximum height of eight (8) feet shall be installed around the boundary of the solar farm. The fence shall contain appropriate warning signage that is posted such that it is clearly visible on the site.
  - iii. The applicant shall maintain the fence and adhere to the weed/grass control plan. If the Operating Company does not adhere to the proposed plan a fine

of \$500 per week will be assessed until the Operating Company or Successor complies with the weed/grass control and fencing requirements.

- (4) Manufactures Specifications
  1. The manufacturer's specifications and recommended installation methods for all major equipment, including solar panels, mounting systems and foundations for poles and racks.
- (5) Connection and Interconnection
  - i. A description of the method of connecting the SOLAR array to a building or substation.
  - ii. Utility interconnection details and a copy of written notification to the utility company requesting the proposed interconnection.
- (6) Setbacks
  - i. A minimum of fifty (50) feet must be maintained on all property liens. Solar panels shall be kept at least one hundred (100) feet from a principal residential dwelling that is not part the Special Use permit.
- (7) Aviation Protection.
  - i. For solar energy systems located within five hundred (500) feet of an airport or within approach zones 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.
- (8) Fire Protection
  - i. A fire protection plan for the construction and the operation of the facility, and emergency access to the site.
- (9) Endangered Species and Wetlands.
  - i. Solar Farm developers shall be required to initiate a natural resource review consultation with the Illinois Department of Natural Resources (IDNR) through the Department's online EcoCat Program. Areas reviewed through this process will be endangered species and wetlands. The cost of the EcoCat consultation shall be borne by the developer.
- (10) Road Use Agreements.
  - i. All routes on either County or Township Road that will be used for the construction and maintenance purposes shall be identified on the site plan. All routes for either egress or ingress need to be shown. The routing shall be approved subject to the approval of the Tazewell County Highway Engineer in coordination with the Township Road Commissioners. The Solar Farm Developer complete and provide a preconstruction baseline survey to determine existing road conditions for assessing potential future damage due



to development related traffic. The development shall provide a road repair plan to ameliorate any and all damage, installation or replacement of roads that might be required by the developer. The developer shall provide a letter of credit or surety bond in an amount and form approved by the Highway/Road Officials when warranted.

(11) Decommissioning of the Solar Farm.

- i. The Developer shall provide a decommissioning plan for the anticipated service life of the facility or in the event the facility is abandoned or had reached its life expectancy. If the solar farm is out of service or not producing electrical energy for a period of twelve (12) months, it will be deemed nonoperational and decommissioning and removal of that facility will need to commence according to the decommissioning plan as provided and approved. A cost estimate for the decommissioning of the facility shall be prepared by a professional engineer or contractor who has expertise in the removal of the solar farm. The decommissioning cost estimate shall explicitly detail the cost before considering any projected salvage value of the out of service solar farm. The decommissioning cost shall be made by a cash, surety bond or irrevocable letter of credit before construction commences. Further a restoration plan shall be provided for the site with the application. The decommissioning plan shall have the following provided:

- (1). Removal of the following within six (6) months:

- a. All solar collectors and components, aboveground improvements and outside storage.
- b. Foundations, pads and underground electrical wires and reclaim site to a depth of four (4) feet below the surface of the ground.
- c. Hazardous material from the property and dispose in accordance with Federal and State law.

- (2) The decommissioning plan shall also recite an agreement between the applicant and the County that:

- a. The financial resources for decommissioning shall be in the form of a Surety Bond, or shall be deposited in an escrow account with an escrow agent acceptable to the Community Development Administrator.
- b. A written escrow agreement will be prepared, establishing upon what conditions the funds will be disbursed.
- c. The County shall have access to the escrow account funds for the expressed purpose of completing decommissioning if decommissioning is not completed by the applicant within six (6) months of the end of project life or facility abandonment.
- d. The County is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning.

- e. 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 applicant or applicant successor for decommissioning costs in excess of the amount deposited in escrow and to file a lien against any real estate owned by applicant or applicant's successor, or in which they have an interest, for the amount of the excess, and to take all steps allowed by law to enforce said lien.
- f. Financial provisions shall not be so onerous as to make wind power projects unfeasible.

**7 TCC 7-7 (g) Compliance with Building Code.** All solar energy systems shall comply with the Tazewell County Building and Maintenance Code as well as all Federal and State requirements.

**7 TCC 7-8 (h) Liability Insurance.** The owner operator of the solar farm shall maintain a current general liability policy covering bodily injury and property damage and name Tazewell County as an additional insured with limits of at least two million dollars (\$2,000,000.00) per occurrence and five million (\$5,000,000.00) in the aggregate with a deductible of no more than five thousand dollars (\$5,000.00).

**7 TCC 7-9 (i) Administration and Enforcement.** The Community Development Administrator shall enforce the provisions of this section through an inspection of the solar farm every year. The Community Development Administrator is hereby granted the power and authority to enter upon the premises of the solar farm at any time by coordinating a reasonable time 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 less than twenty-five (\$25.00) nor more than five hundred (\$500.00) for each offense.

**7 TCC 7-10 (j) Fees charged for Building Permits.** The fees for processing the applications for building permits and mechanical permits shall be collected by the Community Development Administrator who shall be accountable to the County for such fees as follows:

i.	0-4 kilowatts (kW-dc)	\$75.00
	5-10 kilowatts (kW-dc)	\$150.00
	11-50 kilowatts (kW-dc)	\$300.00
	51-100 kilowatts (kW-dc)	\$500.00
	101-500 kilowatts (kW-dc)	\$1,000.00
	501-1000 kilowatts (kW-dc)	\$3,000.00
	1001-2000 kilowatts (kW-dc)	\$5,000.00