

SECTION 9.16 COMMERCIAL SOLAR ENERGY SYSTEMS

1. **CONDITIONAL USE PERMIT REQUIREMENTS.** The solar energy regulations and standards described in this section pertain to the creation of large-scale ground-mounted solar photovoltaic installations that primarily sell electricity to be used off-site. The regulations set forth below apply to the construction, operation, and/or repair of large-scale ground-mounted Commercial Solar Energy Systems and shall be allowed as a Conditional Use in the Agricultural (A) District and the Industrial (I) District, pursuant to Chapter 11 as to Conditional Use Permit approvals and the following requirements:
 - a. **Procedure.** The Planning Commission review of a Conditional Use Permit application for a Commercial Solar Energy System is a two-step process. The first step is the public hearing and decision by the Planning Commission, per the procedures for review in Chapter 11. The second step, which may occur at a separate meeting for a Commercial Solar Energy System, is the site plan review process by the Planning Commission as described in Chapter 10. A decision on the Conditional Use Permit application by the Planning Commission is inclusive of all proposed Commercial Solar Energy Systems, underground electrical lines, sub-station(s), junction boxes, laydown yard(s), and any operations/maintenance building(s).
 - b. **Applicant Identification.** Applicant name and address in full, a statement that the applicant is the owner involved or is acting on the owner's behalf, the address of the property involved in the application (substitution may include a legal description or parcel identifications number(s)), and any additional contact information. Each application for a Commercial Solar Energy System shall also be dated to indicate the date the application is submitted to Tuscola Township.
 - c. **Fee.** An applicant shall remit an application fee and an escrow deposit, in the amount specified by Township policy. This schedule shall be based on the cost of the application review and may be adjusted from time to time. If professional review of plans is required, then such costs shall be paid from the escrow deposit.
 - d. **Project Description.** A general description of the proposed project including a legal description of the property or properties on which the project would be located and an anticipated construction schedule.
 - e. **Project Design.** A description and drawing of the proposed technology to include type of solar panel and system, fixed mounted compared to solar tracking, number of panels, and angles of orientation.
 - f. **Insurance.** Proof of the applicant's public liability insurance with at least \$3,000,000 per occurrence to cover the Commercial Solar Energy System, the Township, and the landowner.

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- g. **Certification.** Certifications that the applicant has complied or will comply with all applicable county, state, and federal laws, regulations, and ordinances, including compliance with the Farmland and Open Space Preservation Program (Part 361 of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994 as amended, more commonly known as PA 116).
 - h. **Manufacturers' Data Sheet(s).** Documentation shall include the type and quantity of all materials used in the operation of all equipment.
 - i. **Visual Simulations.** Photo exhibits visualizing the proposed solar energy system, with emphasis on visualizing the location of any required fences, landscaping, access roads, and setbacks from adjacent non-participating property.
 - j. **Maintenance Plan.** Applicant shall submit a maintenance plan that describes the following:
 - 1) Demonstrates the Commercial Solar Energy System will be designed, constructed, and operated to minimize dust generation, including provision of sufficient watering of excavated or graded soil during construction to prevent excessive dust.
 - 2) States the manner how unpaved access roads will be treated and maintained, either with a dust palliative or graveled or treated by another approved dust control method to prevent excessive dust.
 - 3) Provisions that will be employed to minimize the proliferation of weeds during and following construction.
 - k. **Emergency Services.** The Commercial Solar Energy System owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the local fire chief. The owner or operator shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar photovoltaic installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
 - l. **Decommissioning.** Copy of the decommissioning plans and a description of how any surety bond is applied to the decommissioning process.
 - m. **Complaint Resolution.** Description of the complaint resolution process.
2. **SITE PLAN REQUIREMENTS.** The applicant shall submit a site plan in full compliance with Chapter 10 of this zoning ordinance for each Commercial Solar Energy System and other solar energy appurtenances, including the following requirements:
- a. The project area boundaries,
 - b. The location, height, and dimensions of all existing and proposed structures and fencing,
 - c. The location, grades, and dimensions of all temporary and permanent on-site and access roads from the nearest county or state-maintained road,

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- d. Existing topography,
 - e. Water bodies, waterways, wetlands, drainage channels, and drain easements, and
 - f. A site grading, erosion control and storm water drainage plan. At the Township’s discretion, these plans may be reviewed by the Township’s engineering firm.
 - g. All comments from the Tuscola County Drain Commissioner’s office pertaining to the proposed Commercial Solar Energy System shall be submitted to the Planning Commission.
 - h. All new infrastructure, both above and below ground, related to the project. This includes inverters and batteries.
 - i. Location of the project’s interconnection to the electric power transmission infrastructure.
 - j. Identification of a construction/set-up/laydown area.
3. **STANDARDS AND REQUIREMENTS.** Commercial Solar Energy Systems shall meet the following standards and requirements:
- a. **Location of Commercial Solar Energy Systems.**
 - i. All Commercial Solar Energy Systems must comply with the requirements established in the Tuscola Township Zoning Ordinance.
 - ii. All fences and improved areas located on the site shall comply with Section 9.50 (3)(f) below.

Solar panels and any associated structures shall be located at least 60 feet from the nearest non-participating property line.
 - iii. Solar panels and associated racking is limited in height to 20 feet. All other structures shall comply with the height requirements of Section 8.04.
 - iv. The applicant shall include information about project-wide lot coverage calculations. The Tuscola Township zoning ordinance does not specify any maximum lot coverage requirement.
 - b. **Design and Installation Standards**
 - i. All proposed facilities shall comply with all applicable local, state, and federal standards and requirements, including electrical, building, and drain codes.
 - ii. A copy of the application to the utility company that will be purchasing electricity from the proposed site shall be provided to the Planning Commission.

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- iii. All electrical connection systems and lines from the Commercial Solar Energy System to the electrical grid connection shall be located and maintained at a minimum depth of six feet underground.
 - iv. The design and construction of Commercial Solar Energy Systems shall not produce electrical emissions that would interfere with aircraft communications systems or navigation equipment.
 - v. If the Commercial Solar Energy System consists of batteries or storage of batteries, adequate design must be provided to ensure all local, state and federal requirements regulating outdoor battery storage have been met.
 - vi. The applicant must obtain a driveway permit from the Tuscola County Road Commission or MDOT, as applicable.
 - vii. The applicant must obtain any drain permits from the Tuscola County Drain Commission or the Michigan Department of Environment, Great Lakes, and Energy (EGLE), as applicable.
 - viii. The design of landscape buffers for Commercial Solar Energy Systems shall use materials, colors, textures, screening and landscaping that will blend the facility into the natural setting and existing environment.
 - ix. Lighting shall be consistent with local, state, and federal law, and shall be limited to that required for safety and operational purposes. Lighting shall be reasonably shielded from abutting properties.
 - x. Compliance with any applicable airport overlay zoning requirements and the ability to comply with FAA regulations pertaining to hazards to air navigation must be demonstrated.
 - xi. If a Commercial Solar Energy System ownership changes, the new owner/operator must meet with the Tuscola Township Planning Commission to review the conditions of the Conditional Use Permit within 60 days of the change in ownership. Such meeting shall also encompass reviews of the decommissioning bond, Township-approved permits, and other related project documents, as necessary.
- c. **Noise.** Commercial Solar Energy Systems shall not exceed 40 dB(A) at the property line closest to the solar energy system. If the ambient sound pressure level exceeds 40 dB(A), the standard shall be ambient dB(A) plus 5 dB(A).

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d. Light and Glare

- i. All Commercial Solar Energy Systems shall be placed such that solar glare does not project onto nearby inhabited structures or roadways and be considered a nuisance.
- ii. The applicant has the burden of proof that any glare produced does not have an adverse effect on neighboring or adjacent uses through siting and mitigation. If the solar panel systems do produce a glare, the applicant shall be responsible for mitigation, and will provide a mitigation plan.
- iii. The design and construction of a Commercial Solar Energy System shall not produce light emissions, either direct or indirect (reflective), that would interfere with pilot vision and/or traffic control operations.

e. Landscaping

- i. Applicant shall submit a landscape plan detailing all proposed changes to the landscape of the site, including temporary or permanent roads or driveways, grading, vegetation clearing, and planting.
- ii. All Commercial Solar Energy Systems shall have a minimum landscape buffer depth of 20 feet located around the perimeter of the project.

If a proposed Commercial Solar Energy System is located on a single parcel, the location of the landscape buffer shall conform to the setbacks described in the Schedule of Regulations in Section 8.04.

If a proposed Commercial Solar Energy System is planned to be located across several parcels, then the location of the landscape buffer shall not be placed closer than 40 feet from the shared boundary of adjacent non-participating property lines, and no closer than 40 feet from the edge of road right of ways.

The buffer shall contain evergreen trees or bushes planted no more than eight feet apart and at least four feet tall at time of planting. Trees and bushes planted in the buffer shall obtain a height of 10 feet within three growing seasons. The trees or bushes may be trimmed but can be no lower than a height of 10 feet.

To enhance the appearance of the project from nearby sightlines, the landscape buffer shall be placed around the exterior of any perimeter fence, if required by Section 9.50(3)(f)(ii) below.

- iii. Land clearing of natural vegetation shall be limited to that which is necessary for the construction, operation, and maintenance of the Commercial Solar Energy System pursuant to practices of best management of natural areas or good husbandry of the land or forest as prescribed by applicable laws, regulations, and bylaws.

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- iv. Each owner/operator of a Commercial Solar Energy System shall utilize good husbandry techniques with respect to said vegetation, including but not limited to, proper pruning, proper fertilizer, and proper mulching, so that the vegetation will reach maturity as soon as practical and will have maximum density in foliage. Dead or diseased vegetation shall be removed and must be replanted at the next appropriate planting time. Plants or grasses not part of landscaping shall be maintained by the facility operator in accordance with Tuscola Township ordinances.
- v. Applicant must provide a detailed maintenance plan for the proposed solar energy system, and surrounding area, including provisions that will be employed to maintain and promote native vegetation while demonstrating compliance with all applicable Tuscola Township ordinances.
- vi. The landscaping requirements in this section (Section 9.50(3)(e)) supersede the landscaping standards described in Section 15.01.

f. Security

- i. The manufacturers or installer's identification and appropriate warning sign shall be posted on or near the panels in a clearly visible manner; furthermore, an information sign shall be posted and maintained at the entrance(s), which shall list the name and phone number of the operator
 - ii. Commercial Solar Energy Systems may be surrounded by a chain link fence. Fencing shall not exceed 8 feet. The fence shall be designed to restrict unauthorized access. See Section 3.15 for other options that may apply to Commercial Solar Energy Systems.
 - iii. No portion of the Commercial Solar Energy System shall contain or be used to display advertising. The manufacturers' name and equipment information or dedication of ownership shall be allowed on any equipment of the solar energy system provided they comply with the prevailing sign regulation.
- g. **Annual Reporting:** Energy production summary reports by month shall be provided annually for the Commercial Solar Energy System, to be submitted to the Zoning Administrator by February 1 of each year, for the preceding year.

4. ABANDONMENT AND DECOMMISSIONING

- a. Abandonment: A Commercial Solar Energy System that ceases to produce energy on a continuous basis for 12 months will be considered abandoned unless the current

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responsible party (or parties) with ownership interest in the Commercial Solar Energy System provides substantial evidence (updated every 6 months after 12 months of no energy production) to the Planning Commission or its designee of the intent to maintain and reinstate the operation of that facility. It is the responsibility of the responsible party (or parties) to remove all equipment and facilities and completely restore the property to its condition prior to development of the Commercial Solar Energy System.

- i. Upon determination of abandonment, the Zoning Administrator shall notify the party (or parties) responsible that they must remove the Commercial Solar Energy System and restore the site to its condition prior to development of the Commercial Solar Energy System within six months of notice by the Planning Commission or its designee.
 - ii. If the responsible party (or parties) fails to comply, the Township or its designee, may remove the Commercial Solar Energy System, sell any removed materials, and initiate judicial proceedings or take any other steps legally authorized against the responsible parties to recover the costs required to remove the Commercial Solar Energy System and restore the site to a nonhazardous predevelopment condition.
- b. Decommissioning: A decommissioning plan signed by the party responsible for decommissioning and the landowner addressing the following shall be submitted prior to the issuance of the zoning permit, which shall include:
- i. The anticipated life of the project;
 - ii. The estimated total decommissioning costs in current dollars (decommissioning costs net of salvage value shall not be considered by the Planning Commission);
 - iii. The method of ensuring that funds will be available for decommissioning and restoration, to include but not limited to:
 1. Complete removal of all non-utility owned equipment, conduit, structures, fencing, roads, solar panels and foundations, and
 2. Complete restoration of property to condition prior to development of the Commercial Solar Energy System;
 - iv. The anticipated manner in which the project will be decommissioned and the site restored.
 1. Decommissioning shall include the removal of each Photovoltaic Panel, all electrical components including all electrical connection systems, and associated facilities within the footprint of the Commercial Solar Energy System, regardless of depth.

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2. All access roads/driveways to the Commercial Solar Energy System shall be removed, cleared, and graded by the facility owner, unless the property owner requests, in writing, a desire to maintain the access road/driveway. The Township will not be assumed to take ownership of any access road and such remaining roads will not be considered public roads.
 3. The site and any disturbed earth shall be stabilized, graded, and cleared of any debris by the owner of the Commercial Solar Energy System or its assignees. If the site is not to be used for agricultural purposes following removal, the site shall be seeded to prevent soil erosion, and restored to its condition existing prior to any construction activities, unless the property owner(s) requests, in writing, the land surface areas not be restored.
- v. A provision to give notice to the Township one year in advance of decommissioning.
 - vi. A surety bond to assure payment of the cost of decommissioning shall be required. To ensure proper removal of the structure when it ceases to be used for a period of one year or more, any application for a new Commercial Solar Energy System shall include a description of the financial security guaranteeing removal of the Commercial Solar Energy System which will be posted prior to receiving a Zoning Permit for the facility. The security shall be a: 1) irrevocable bank letter of credit; or 2) performance bond in a form approved by the Township Board of Trustees. The amount of such guarantee shall be no less than the estimated cost of removal and may include a provision for inflationary cost adjustments. When determining the amount of such required security, the Township Board of Trustees may also require future meetings at pre-set intervals, to establish corrected values for decommissioning. The financial security instrument shall be adjusted to each determined corrected value.
 - vii. The estimate shall be prepared by the engineer for the developer and shall be approved by the Township Board of Trustees.
 - viii. The timeframe for completion of decommissioning activities.
 - ix. A condition of the surety bond shall be notification by the surety company to the Township Zoning Administrator 30 days prior to its expiration or termination.

5. COMPLAINT RESOLUTION

- a. The Commercial Solar Energy System operator/owner shall submit a detailed, written complaint resolution process developed by the Commercial Solar Energy System operator/owner to resolve complaints concerning the construction or operation of the Commercial Solar Energy System. The complaint resolution process must be approved by the Planning Commission as a condition of approval of the Conditional Use permit application.
- b. The Planning Commission shall be kept appraised of all complaints and shall receive a report outlining the issues, the progress, and the resolution of each such complaint. Such report shall be presented every six months by the operator/owner to the Planning Commission.

- 6. CONFLICTING PROVISIONS.** In the event of a conflict between any provision in this section and any other section of this Zoning Ordinance with regard to Commercial Solar Energy Systems, the provisions of this section shall control.