

SOLAR ENERGY SYSTEMS (SES)
TOWNSHIP OF WELLS
ORDINANCE NO. 100-02
Date of Adoption January 9, 2020

A **ZONING ORDINANCE AMENDMENT** to provide for the land development, installation and construction regulations for large photovoltaic solar farm facilities subject to reasonable conditions that will protect the public health, safety and welfare. These regulations establish minimum requirements and standards for the placement, construction, and modification of large photovoltaic solar farm facilities.

THE TOWNSHIP OF WELLS ORDAINS:

Section 1. Title

This ordinance shall be known and shall be cited as the Wells Township Solar Energy Systems Zoning Ordinance No. 100-02 and shall be subject to and listed under Section 5.02 Special Land Uses, letter O and Section 9.02, letter H as Large Photovoltaic Solar Farm Facilities of the Wells Township Zoning Ordinance No.100 of 2012.

Section 2. Purpose and Intent

This Ordinance is intended to:

1. Provide for a special land use that will promote the use of solar energy within the Township as a clean alternative energy source.
2. Protect Township areas from any potentially adverse effects of solar farm facilities and related structures or devices so that the public health, safety, and welfare will not be jeopardized.
3. Establish standards and procedures by which the siting, design, engineering, installation, operation, and maintenance of solar farm facilities shall be governed.
4. Provide for the removal of abandoned or noncompliant solar farm facilities and related structures or devices.

Section 3. Definitions.

In addition to Ordinance Article 21.01 definitions, the following terms and phrases shall have the meanings set forth below:

Abandonment: To give up, discontinue, withdraw from. Any solar energy system that ceases to produce energy on a continuous basis for twelve (12) months will be considered abandoned.

Decommissioning Plan: A document that details the planned shut down or removal of a solar energy system from operation or usage.

Fence: A continuous barrier extending from the surface of the ground to a uniform height of not less than six (6) feet from the ground at any given point, constructed of steel, or other material of similar nature and strength.

Grid: The infrastructure of power lines, transformers and substations that delivers electric power to buildings. The utility grid is owned and managed by electric utility companies.

LAm_{ax}: The maximum sound level per a noise event.

Large Photovoltaic Solar Farm Facilities (Solar Farms): A utility-scale commercial facility that converts sunlight into electricity, whether by photovoltaics, or any other various solar technologies for the primary purpose of wholesale or retail sales of generated electricity off-site. Solar Farms do not include small scale solar panels or technologies installed at individual residential or commercial locations (e.g. roof or ground mounted panels) that are used exclusively for private purposes and not utilized for any commercial resale of any energy, except for the sale of surplus electrical energy back to the electrical grid. These installations are permitted as Accessory Building or Accessory Use.

Permitting: The process by which a local unit of government allows for certain development, changes, and activities in their jurisdiction.

Photovoltaic (PV): A method of generating electrical power by converting solar radiation (sunlight) into direct current electricity using semiconductors.

Public Road: Any road or highway which is now or hereafter designated and maintained by the Tuscola County Road Commission as part of the County Road System. Setbacks shall be measured from the road right of way.

Solar Glare: The effect produced by light reflecting from a solar panel with an intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

Solar Energy System (SES): The total components and subsystems that, in combination, convert solar energy suitable for connection to utilization load.

Section 4. Requirements for Development and Design Standards

To provide reasonable standards for physical location of solar energy structures within a certain parcel or parcels, as well as the relationship between those structures and neighboring properties.

1. Site Plan: Except where noted in this section, it shall be unlawful to construct, erect, install, use or locate a solar energy system unless a special land use permit, final site plan and/or zoning permit have been approved pursuant to this Ordinance.
2. Location: The location of a solar energy system is limited to the AFR-Agriculture/Forestry/Residential and I-Industrial zoning districts within the Township.
3. Minimum lot size: Large photovoltaic solar farm facilities shall not be constructed on parcels less than twenty (20) acres in size.
4. Height Restrictions: All photovoltaic panels located in a solar farm shall be restricted to a height of 16 feet.

5. Setbacks: All photovoltaic solar panels and support structures associated with such facilities (excluding perimeter security fencing) shall be a minimum of seventy-five (75) feet from a side or rear property line and a minimum of one hundred (100) feet from any road or highway right-of-way.
6. Maximum Lot Coverage: Maximum lot coverage restrictions shall not apply to photovoltaic solar panels. Any other regulated structures on the parcel are subject to maximum lot coverage restrictions.
7. Safety/Access: A security fence (height and material to be established through the special land use permit process) shall be placed around the perimeter of the solar power plant and electrical equipment shall be locked. Knox boxes and keys shall be provided at locked entrances for emergency personnel access. Electric fencing is not permitted.
8. Sound Pressure Level: No large photovoltaic solar farm facilities shall exceed forty (40) dBA L_{max} as measured at the property line.
9. Landscaping: The perimeter of large photovoltaic solar farm facilities shall also be screened and buffered by installed evergreen or native vegetative plantings whenever existing natural vegetation does not otherwise reasonably obscure the large photovoltaic solar farm facilities from a public street and/or adjacent residential structures, subject to the following requirements:
 - a. The evergreen or native vegetative buffer shall be composed of native or evergreen trees that at planting shall be minimum of four (4) feet in height and shrubs two (2) feet in height. The evergreen trees shall be spaced no more than fifteen (15) feet apart on center (from the central trunk of one plant to the central trunk of the next plant), native trees shall be placed not more than thirty (30) feet apart on center and shrubs shall be spaced no more than seven (7) feet apart on center. All unhealthy (sixty (60) percent dead or greater) and dead material shall be replaced by the applicant within one (1) year, or the next appropriate planting period, whichever occurs first.
 - b. Failure to install or continuously maintain the required vegetative requirement shall constitute a violation of this Ordinance and any Special Land Use Permit may be subject to revocation.
10. Signage: No advertising or non-project related graphics shall be on any part of the solar arrays or other components of the large photovoltaic solar farm facilities. This exclusion does not apply to entrance gate signage or notifications containing points of contact or any and all other information that may be required by authorities having jurisdiction for electrical operations and the safety and welfare of the public.
11. All electrical interconnection and/or distribution lines shall comply with all applicable codes and standard commercial large-scale utility requirements. Use of above ground transmission lines shall be prohibited within the site, with underground lines placed at a depth of four (4) feet or deeper.
12. Local, State, and Federal Permits: Large photovoltaic solar farm facilities shall be required to obtain all necessary permits from the U.S. Government, State of Michigan, and Wells Township, and comply with standards of the State of Michigan adopted codes.

Section 5. Abandonment and Decommissioning

Following the operational life of the project, the applicant shall perform decommissioning and removal of the large photovoltaic solar farm facilities and all its components.

1. The applicant shall prepare a decommissioning plan and submit it to the Planning Commission for review and approval prior to issuance of the Special Land Use Permit.
2. The decommissioning plan shall state how the large photovoltaic solar farm facilities will be decommissioned, provide the estimated cost of decommissioning, the financial resources to be used to accomplish decommissioning and the escrow agent with which the resources will be deposited. Any large photovoltaic solar farm facilities that are not operated for a continuous period of twelve (12) months shall be considered abandoned and shall be removed under the decommissioning plan.
3. Under this plan, all structures, concrete, piping, facilities, and other project related materials above-grade and below-grade shall be removed offsite for disposal. All access roads or driveways shall be removed, cleared, and graded by the applicant, unless the property owner(s) request, in writing, a desire to maintain any access road or driveways. The Township or County will not be assumed to take ownership of any access road or driveways. The ground must be restored to its original topography or mutually agreed variation of the original topography within three hundred sixty-five (365) days of abandonment or decommissioning.
4. The decommissioning plan shall also include an agreement between the applicant and the Township that:
 - A. Prior to the issuance of the permit, the applicant shall furnish to the Township a Professional Engineer's estimate of decommissioning. A performance guarantee in an amount equal to or greater than one hundred twenty-five percent (125%) of the estimated cost of decommissioning shall be approved by the Township. The guarantee shall be in the form of either a surety bond or cash deposit into an escrow account with an escrow agent acceptable to the Township. Due to changes in the economy, CPI, value of scrap, etc., the Township reserves the right to adjust the required performance guarantee every two years.
 - B. The Township shall have access to the escrow account funds for the expressed purpose of completing decommissioning if decommissioning is not completed by the applicant within three hundred sixty-five (365) days of the end of the project life or facility abandonment.
 - C. The Township is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning.
 - D. The Township is granted the right to seek injunctive relief to effect or complete decommissioning, as well as the Township'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 property 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. Financial provisions shall not exceed reasonable anticipated decommissioning costs.

Section 6: Inspections

The Township shall have the right at any reasonable time, to provide same-day notice to the applicant to inspect the premises on which any large photovoltaic solar farm facilities is located. The Township may hire one or more consultants, with approval from the applicant (which shall not be unreasonably withheld), to assist with inspections at the applicant's or project owner's expense. Inspections must be coordinated with, and escorted by, the applicant's operations staff at the large photovoltaic solar farm facilities to ensure compliance with the Occupational Safety and Health administration (OSHA), NESC and all other applicable safety guidelines.

Section 7: Maintenance and Repair

Each large photovoltaic solar farm facility must be kept and maintained in good repair and condition at all times. If the Township Zoning Administrator determines that a large photovoltaic solar farm facility fails to meet the requirements of this ordinance and the Special Land Use Permit, or that it poses a safety hazard, the Zoning Administrator, or his or her designee, shall provide notice to the applicant of the safety hazard. If, after a reasonable cure period (not to exceed seven (7) days), the safety hazards are not corrected, the applicant shall immediately shut down the large photovoltaic solar facility and not operate, start or restart the large photovoltaic solar facility until the issues have been resolved. Applicant shall keep a maintenance log on the solar array(s), which shall be available for the Township's review within 48 hours of such request. Applicant shall keep all sites within the large photovoltaic solar farm facility neat, clean and free of refuse, waste or unsightly, hazardous or unsanitary conditions.

Section 8: Roads

Any material damages to a public road located within the Township resulting from the construction, maintenance or operation of a large photovoltaic solar farm facility shall be repaired at the applicant's expense. In addition, the applicant shall submit to the appropriate State or County agency a description of the routes to be used by construction and delivery vehicles; and road improvements that will be necessary to accommodate construction vehicles, equipment or other deliveries. The applicant shall abide by all State or County requirements regarding the use and/or repair of the roads.

Section 9: Additional Special Land Use Criteria

The following topics shall be addressed in a Special Land Use application for such large photovoltaic solar farm facilities in addition to Section 4, SES REQUIREMENTS FOR DEVELOPMENT AND DESIGN STANDARDS

1. Project description and rationale: Identify the type, size, rated power output, performance, safety and noise characteristics of the system, including the name and address of the manufacturer, and model. Identify time frame, project life, development phases, likely markets for the generated energy and possible future expansions.
2. Property Owner Permission: Evidence of an agreement between the property owner and facility's owner or operator confirming the owner or operator has permission of the property owner to apply for the necessary permits for construction and operation of the solar energy system.
3. Analysis of onsite traffic: Estimated construction jobs, estimated permanent jobs associated with the development.
4. Visual impacts: Review and demonstrate the visual impact using photos or renditions of the project or similar projects with consideration given to tree plantings and setback requirements.
5. Wildlife: Review potential impact on wildlife on the site.
6. Environmental analysis: Identify impact analysis on the water quality and water supply in the area, and dust from project activities.
7. Waste: Identify solid waste or hazardous waste generated by the project.
8. Lighting: Provide lighting plans showing all lighting within the facility. No light may adversely affect adjacent parcels. All lighting must be shielded from adjoining parcels, and light poles are restricted to eighteen (18) feet in height.
9. Solar glare: Provide review of reflective angles to ensure unreasonable glare will not impact adjacent properties.
10. Transportation plan: Provide access plan during construction and operation phases. Show proposed project service road ingress and egress access onto primary and secondary routes, layout of the plant service road system. Due to infrequent access to such facilities after construction is completed, it is not required to pave or curb solar panel access drives. It will be necessary to pave and curb driveway and parking lots used for occupied offices that are located on site.
11. Public safety: Identify emergency and normal shutdown procedures. Identify potential hazards to adjacent properties, public roadways, and to the community in general that may be created.
12. Sound limitations and review: Identify noise levels at the property line of the project boundary when completed.
13. Telecommunications interference: Identify electromagnetic fields and communications interference generated by the project.
14. Utility company involvement: A copy of the application to the utility company that will be purchasing electricity from the proposed site shall be provided to the Township.

Section 10: Insurance

The applicant is required to have liability insurance in the amount of \$1,000,000.

Furthermore, any contractor or subcontractor that is separate from the applicant is also

required to have liability insurance in the amount of \$1,000,000. A copy of the liability insurance is to be provided to the Township before any work begins.

Section 11: Violation

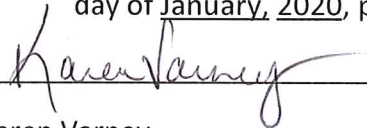
Any person, firm, corporation, or other entity who maintains or operates or who controls the maintenance of a solar energy system in violation of this ordinance shall be guilty of a misdemeanor and subject to prosecution, and if convicted, shall be punished by a fine not to exceed \$500.00. Each day the solar energy system shall be maintained or operated in violation of this ordinance shall constitute a separate liability offense.

Section 12: Severability and Repeal

1. The provisions of this Ordinance are hereby declared to be severable and if any provision, section or part of this Ordinance is declared invalid or unconstitutional by a court of competent jurisdiction, such decision shall only affect the particular provisions, section or part involved in such decision and shall not affect or invalidate the remainder of such Ordinance, which shall continue in full force and effect.
2. All Ordinances or parts of Ordinances in conflict with this ordinance are hereby repealed.

Section 13: Enactment, Effective Date and Certification

1. The provisions of this Wells Township Solar Energy Systems Ordinance are hereby enacted and declared to be immediately necessary for the preservation of the public health, safety, and welfare of the people of the Township of Wells.
2. The effective date of this Ordinance is ordered to be given effect fifteen (15) days after the date of publication.
3. The undersigned Supervisor and Clerk of the Township of Wells hereby certifies that this Ordinance is a true copy of the Ordinance which was duly adopted by the Wells Township Board, at a meeting held on the 9 day of January, 2020 and further certifies that a notice of adoption of this Ordinance was duly published in the Tuscola County Advertiser on the 15 day of January, 2020, pursuant to the Michigan Zoning Enabling Act.



Karen Varney
Wells Township Supervisor



Carmen Stevens
Wells Township Clerk

