

Article: 55.0 SUPPLEMENTAL REGULATIONS AND STANDARDS

7. No portion of an amateur radio tower or antenna shall conduct or display any advertising, message or other graphic representation other than the manufacturers name and identification number. Lettering shall not exceed three (3) inches in height.
8. Amateur radio towers shall be erected or installed in rear and side yards only.
9. Amateur radio towers that are not protected by walls or fences shall have anti-climb plates installed.
10. No more than one amateur radio tower shall be allowed as a permitted use on any one site. Site shall mean any one parcel or group of adjacent parcels under a single or unified ownership. Additional towers on a site may be allowed as a special use.
11. **Removal of amateur radio towers:**

Amateur radio tower shall be required to be removed at owner's expense in the event that:
 - a. The owner of property on which a tower is located sells or otherwise ceases to occupy the property and the new resident does not possess a current FCC amateur radio operator license.
 - b. The tower is in a state of disrepair or an unsafe condition.
 - c. Upon expiration and non-continuance of the FCC license.

SECTION - 55.19 - WIND ENERGY CONVERSION SYSTEMS

A. Purpose

Lodi Township promotes the effective and efficient use of Wind Energy Conversion Systems with the minimum regulations on the siting, design, and installation of conversion systems so that the public health, safety, and welfare of neighboring property owners or occupants will not be jeopardized. In no case shall the provision of this ordinance guarantee the wind rights or establish access to the wind.

B. Definitions

1. "Wind Energy Conversion System" (WECS) shall mean any device such as a wind charger, windmill, or wind turbine that converts wind energy to a form of usable energy.
 - a. "Agricultural WECS" shall mean any WECS that is accessory to a permitted farm or agricultural operation, and is designed and built to serve the needs of the farm or agricultural operation.
 - b. "Private WECS" shall mean any WECS that is accessory to a principal non-farm, non-agricultural use located on the same lot, and is designed and built to serve the needs of the principal use.
 - c. "Commercial WECS" shall mean any WECS that is designed and built to provide electricity to the electric utility's power grid.
2. "Manual and Automatic Controls" give protection to power grids and limit rotation of a WECS' blades to below the designed limits of the conversion system.
3. An "Authorized Factory Representative" shall mean an individual with technical training of a WECS who has received factory installation instructions and is certified in writing by the manufacturer of the WECS.
4. A "Professional Engineer" shall mean any licensed engineer registered in the State of Michigan.
5. A "Utility Scale" wind farm shall mean all wind farms that produce greater than 50 kilowatts of energy.

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6. "Facility Abandonment" shall mean out of production for a period of time not less than one year. (See Section 55.19 H)

C. Approval Required

Except where noted in this Section, it shall be unlawful to construct, erect, install, alter, or locate any WECS project within Lodi Township unless a special use permit has been obtained pursuant to this Ordinance.

1. Agricultural WECS projects accessory to permitted farm and agricultural operations shall be exempt from the requirements of this Section. Agricultural WECS projects shall conform to the regulations of the zoning district, including maximum height and minimum setback standards.
2. Application for special use permit required by this Ordinance shall be made on forms provided by Lodi Township and shall contain the following information, in addition to Article 50.0:
 - a. Plot plan to show location of the WECS pole or tower, guy lines where required, guy line anchor bases, and their distance from all property lines;
 - b. Methods to screen the base of the WECS pole and/or other ground apparatus.
 - c. A permit fee for each WECS as set by Lodi Township Board must accompany the application.

D. General Standards

The following standards shall apply to all private and commercial wind energy conversion systems in Lodi Township:

1. Design Safety Certification

The safety of the design of all private and commercial WECS towers shall be certified by a Professional Engineer registered in the State of Michigan. The standard for certification shall be included with the permit application.

2. Controls and Brakes

All private and commercial WECS projects shall be equipped with manual and automatic controls to limit rotation of blades to a speed below the designed limits of the WECS. The Professional Engineer must certify that the rotor and overspeed control design and fabrication conform to applicable design standards. No changes or alterations from certified design shall be permitted unless accompanied by a Professional Engineer's statement of certification.

3. Electrical Components

All electrical compartments, storage facilities, wire conduit and interconnections with utility companies will conform to national and local electrical codes.

4. Compliance with Township Ordinances

All private and commercial WECS projects shall be in compliance with all Lodi zoning ordinance requirements and other applicable ordinances.

5. Setbacks

All private and commercial WECS projects must be setback from property lines at a distance equal to or greater than one hundred fifty percent (150%) of the height of the structure, measured from the base of the structure to the highest reach of its blade.

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6. Height

Private WECS projects shall conform to the maximum height standards of the zoning district. Commercial WECS projects shall be exempt from the height requirements of this Ordinance, subject to the provisions of Special Uses, ARTICLE 50.0 and compliance with FAA regulations.

7. Installation Certification

The Professional Engineer shall certify that the construction and installation of the private or commercial WECS project meets or exceeds the manufacturer's construction and installation standards.

8. Climb Prevention

All private and commercial WECS project towers or poles must be unclimbable by design or protected by anti-climbing devices such as:

- a. Fences with locking portals at least six feet high;
- b. Anti-climbing devices 12 feet from base of pole; or
- c. Anchor points for guy wires supporting tower shall be enclosed by a six-foot high fence or shall be located within the confines of a yard that is completely fenced.

9. Interference

It shall be the responsibility of the person in charge of the private or commercial WECS to submit acceptable documentation as part of the special use permit to determine if the WECS project would in any way cause interference with microwave transmissions, residential television reception or radio reception.

10. Fire Risk

All private and commercial WECS projects must adhere to all applicable electrical codes and standards, must remove fuel sources, such as vegetation, from the immediate vicinity of electrical gear and connections, and must utilize twistable cables on turbines.

11. Waste

All solid wastes, whether generated from supplies, equipment parts, packaging, operation or maintenance of the WECS, including old parts and equipment, shall be removed from the site immediately and disposed of in an appropriate manner. All hazardous waste generated by the operation and maintenance of the WECS, including but not limited to lubricating materials, shall be removed from the site immediately and disposed of in a manner consistent with all local, state, and federal rules and regulations.

12. Noise Levels

The noise level measured at the property line of the property on which the private or commercial WECS project has been installed shall not exceed 55 decibels.

13. Liability Insurance

The owner or operator of the private or commercial WECS project shall maintain a current insurance policy with a bond rating acceptable to the Township to cover installation and operation of the WECS project. The amount of the policy shall be established as a condition of special use permit approval. For a private WECS projects accessory to a principal residence, proof of homeowner's insurance with specific coverage for the WECS shall satisfy this requirement.

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The following additional standards shall apply to all commercial wind energy conversion systems in Lodi Township:

1. Color

Towers and blades shall be painted any neutral color that is acceptable to Lodi Township or otherwise required by law.

2. Compliance with FAA

It shall be the responsibility of the person in charge of the commercial WECS project to complete the proper FAA applications and obtain the proper permits for the WECS project. It shall also be the responsibility of the person in charge of the commercial WECS project to obtain a determination of no significant impact to air navigation from the FAA.

3. Warnings

A visible warning sign of "High Voltage" may be required to be placed at the base of all commercial WECS projects. The sign must have at a minimum six-inch letters with 3/4-inch stroke. Such signs shall be located a maximum of three hundred (300) feet apart and at all points of site ingress and egress.

4. Annual Inspection

Every commercial WECS project must be inspected annually by an Authorized Factory Representative or Professional Engineer to certify that it is in good working condition and not a hazard to the public. Such records shall be submitted to Lodi Township and considered a part of the continuing special use permit.

5. Compliance with additional Regulations

It shall be the responsibility of the person in charge of the commercial WECS project to contact the FCC and FAA regarding additional permits necessary or any other applicable Federal or State regulations for the installation, prior to the Lodi Township granting a Special Use Permit.

6. Migratory Birds

The Township may require an avian study conducted by a qualified professional to determine any potential impacts the commercial WECS project may present to migratory birds. The study as part of the special use permit must provide assurances that the WECS project does not negatively impact the path of migratory birds.

7. Decommissioning Plan and Escrow

The commercial WECS project must contain a Decommissioning Plan to ensure it is properly decommissioned upon the end of the project life or facility abandonment. Decommissioning shall include: removal of all structures (including transmission 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 decommissioning plan shall state how the facility will be decommissioned, the Professional Engineer's estimated cost of decommissioning, the financial resources to be used to accomplish decommissioning, and the escrow agent with which the resources shall be deposited. The decommissioning plan shall also include an agreement between the applicant and the Township 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 Lodi Township.

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- 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 six (6) months of the end of 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 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. Financial provisions shall not be so onerous as to make wind power projects unfeasible.