

**Topic:** Wind Energy  
**Resource Type:** Regulations  
**State:** New York  
**Jurisdiction Type:** Municipal  
**Municipality:** Town of Eden  
**Year (adopted, written, etc.):** 2004  
**Community Type - applicable to:** Suburban; Rural  
**Title:** Town of Eden Wind Energy Conversion Systems Ordinance  
**Document Last Updated in Database:** April 14, 2017

### ***Abstract***

Chapter 217 of the Town Code for the Town of Eden is designed to promote the effective and efficient use of wind energy conversion systems (WECS) and to regulate the placement of wind energy conversion systems so that the public health, safety, natural resources, and aesthetics will not be jeopardized.

### ***Resource***

Town of Eden NY Wind Energy Conversion Systems  
Code of the Town of Eden NY  
Chapter 217: Wind Energy Conversion Systems  
General Code

[HISTORY: Adopted by the Town Board of the Town of Eden 4-28-2004 by L.L. No. 3-2004. Amendments noted where applicable.]

#### **§ 217-1. Purpose.**

The Town Board of the Town of Eden adopts this chapter to promote the effective and efficient use of wind energy conversion systems (WECS) and to regulate the placement of wind energy conversion systems so that the public health, safety, natural resources, and aesthetics will not be jeopardized.

#### **§ 217-2. Findings.**

A. The Town Board of the Town of Eden finds and declares that wind energy is an abundant, renewable and nonpolluting energy resource of the Town and that its conversion to electricity will reduce our dependence on nonrenewable energy sources and decrease the air and water pollution that results from the use of conventional energy sources.

B. The Town Board of the Town of Eden further finds and declares that:

- (1) Wind turbines that convert wind energy to electricity are currently available on a commercial basis from many manufacturers.
- (2) The generation of electricity from properly sited wind turbines can be cost effective, and in many cases existing power distribution systems can be used to transmit electricity from wind-generating stations to utilities or other users.
- (3) Regulation of the siting and installation of wind turbines is necessary for the purpose of protecting the health and safety of neighboring property owners and the general public, and the aesthetics of the community.

### **§ 217-3. Definitions.**

As used in this chapter, the following terms shall have the meanings indicated:

**OVERSPEED CONTROL** — A mechanism used to limit the speed of blade rotation to below the design limits of the WECS.

**SITE** — The physical location of a WECS, including the related tower and transmission equipment.

**SWEPT AREA** — The largest area of the WECS which extracts energy from the wind stream. In a conventional propeller-type WECS, there is a direct relationship between swept area and the rotor diameter.

**TOTAL HEIGHT** — The height of the tower and the furthest vertical extension of the WECS.

**WIND ENERGY CONVERSION SYSTEM (WECS)** — A machine that converts the kinetic energy in the wind into a usable form (commonly know as a "wind turbine" or "windmill"). The WECS includes all parts of the system except the tower and the transmission equipment; the turbine or windmill may be on a horizontal or vertical axis, rotor or propeller.

**WINDMILL FARMS** — More than one WECS (two or more wind turbines or windmills) located within one site or adjacent sites.

### **§ 217-4. Requirements.**

A. Zoning district requirements.

- (1) A WECS and a windmill farm may be allowed in the Conservation (C), Agricultural (A), General Industrial (GI), Planned Industrial (PI), Suburban Residential (SR) and Rural Residential (RR) Zoning Districts of the Town of Eden only by special use permit.
- (2) Neither a WECS nor a windmill farm shall be allowed in the Hamlet Residential (HR), General Business (GB), Office Business (OB) or Local Business (LB) Zoning Districts.

B. Application requirements. All site plan applications and special use permit applications for WECS and windmill farms shall meet the requirements of §§ 225-30 and 225-36 of the Eden Town Code and include a drawing that depicts the following additional requirements:

- (1) Property lines and physical dimensions of the site.
- (2) Location, approximate dimensions and types of major existing structures and uses on site.
- (3) Location and elevation of the proposed WECS.
- (4) Location of all aboveground utility lines on site or within one radius of the total height of the WECS.
- (5) Location and size of structures and trees above 35 feet within a five-hundred-foot radius of the proposed WECS. For purposes of this requirement, electrical transmission and distribution lines, antennas and slender or open lattice towers are not considered structures.
- (6) Show the zoning designations of the immediate and adjacent sites and the locations of any buildings or improvements that are within the fall zone of a proposed tower as set forth in Chapter 225, Zoning.
- (7) Include make, model, picture and manufacturer's specifications, including noise decibels.

C. General provisions. Approval of all site plans or special use permits for the installation of a WECS or windmill farm shall comply with the following requirements:

- (1) WECS size. This chapter covers those WECS of any size.
- (2) Water pumpers. Nonelectrical windmills used for pumping water may be exempted from the provisions of Subsection C(3) through (15), but they must be sited so that any tipover will be harmless to others.
- (3) Compliance with Building Code.
  - (a) Building permit applications shall be accompanied by standard drawings of structural components of the wind energy conversion system, including support structures, tower, base and footings. Drawings and any necessary calculations shall be certified, in writing, by a New York State registered professional engineer that the system complies with the current building code. This certification would normally be supplied by the manufacturer.
  - (b) Where the structural components or installation vary from the standard design or specification, the proposed modifications shall be certified by a New York State registered professional engineer for compliance with the seismic and structural design provisions of the Building Code.
- (4) Compliance with Electrical Code.
  - (a) Building permit applications shall be accompanied by a line drawing identifying the electrical components of the wind system to be installed in sufficient detail to allow for a determination that the manner of installation conforms to the electrical code. The application shall include a statement from a New York State registered professional engineer indicating that the electrical system conforms with good engineering practices and complies with the electrical code. This certification would normally be supplied by the manufacturer. All equipment and materials shall be used or installed in accordance with such drawings and diagrams.
  - (b) Where the electrical components of an installation vary from the standard design or specifications, the proposed modifications shall be reviewed and certified by a New York State registered professional engineer for compliance with the requirements of the electrical code and good engineering practices.
- (5) Rotor safety. Each WECS shall be equipped with both manual and automatic controls to limit the rotational speed of the blade below the design limits of the rotor. The application must include a statement by a New York State registered professional engineer certifying that the rotor and overspeed controls have been

designed and fabricated for the proposed use in accordance with good engineering practices. The engineer should also certify the structural compatibility of possible towers with available rotors. This certification would normally be supplied by the manufacturer and include the distance and trajectory of the thrown blade from an exploding turbine or propeller according to the Loss of Blade Theory.

- (6) Guy wires. Anchor points for guy wires for the WECS tower shall be located within property lines and not on or across any aboveground electrical transmission or distribution line. The point of ground attachment for the guy wires shall be enclosed by a fence six feet high.
- (7) Tower access. Towers should have either:
  - (a) Tower-climbing apparatus located no closer than 12 feet to the ground.
  - (b) A locked anticlimb device installed on the tower; or
  - (c) The tower shall be completely enclosed by a locked, protective fence at least six feet high. For windmill farms a protective fence at least six feet high enclosing the entire site may be considered.
- (8) Noise. The WECS shall meet the requirements of any existing noise ordinance of the Town of Eden. Editor's Note: See Ch. 146, Art. II, Noise Control. In general, the noise of the turbine shall not exceed 50 dba, as measured at the boundaries of all the closest parcels that are owned by non-site owners and abut the site parcels.
- (9) Electromagnetic interference. The WECS shall be operated such that no disruptive electromagnetic interference is caused. If it has been demonstrated to a Town Building and Zoning Inspector that a wind energy conversion system is causing harmful interference, the operator shall promptly mitigate the harmful interference.
- (10) Signs. At least one sign shall be posted at the base of the tower warning of electrical shock or high voltage.
- (11) Height. The minimum height of the lowest part of the swept area of any WECS shall be 30 feet above the highest existing major structure or tree within a two-hundred-fifty-foot radius. For purposes of this requirement, electrical transmission and distribution lines, antennas and slender or open-lattice towers are not considered structures. The overall height of a WECS unit shall be equal to

or less than 200 feet.

(12) Setbacks.

- (a) WECS shall be set back from any property line, aboveground utility line or other WECS a distance greater than its overall height, including blades. The WECS shall also not be placed in the front yard of any existing structure.
- (b) In the case of cluster development, a WECS shall be erected within the common open space area and shall be set back from all residences a distance greater than Subsection C(12)(a) above.
- (c) Contiguous property owners may construct a WECS for use in common, provided that the required setback, as defined in Subsection C(12)(a) above, is maintained relative to the property lines of nonparticipant owners.

(13) Utility interconnection (for those WECS which will be interconnected to a utility grid). No wind turbine shall be installed until evidence has been given of a signed interconnection agreement, or letter of intent, with the interconnecting utility company.

(14) Abatement. If a wind energy conversion system or systems are not maintained in operational condition for a period of one year and pose a potential safety hazard, the owner or operator shall take expeditious action to remedy the situation. The Town of Eden reserves the authority to abate any hazardous situation and to pass the cost of such abatement onto the owner or operator of the system. If the Town of Eden determines that the WECS has been abandoned or poses a safety hazard, the system shall be removed within 45 days of written notice to the owner or operator of the system.

(15) Liability insurance. The applicant, owner, lessee or assignee shall maintain a current insurance policy which will cover installation and operation of the wind energy conversion system at all times. As a part of the application review process, the Town may require proof that the applicant is carrying sufficient liability, workers compensation, etc. during installation and operation of proposed facility. Limits for said policy shall be set on size and scope of each project.

(16) Lighting of tower. Lighting of the tower for aircraft and helicopters will conform with FAA standards for wattage and color, when required.

(17) Environmental impact. Any WECS or windmill farm project will be subject to the State Environmental Quality Review Act (SEQRA) and will require a visual

assessment.

(18) Decommissioning and restoration. The applicant shall include the following information regarding decommissioning of the project and restoring the site:

(a) The applicant shall include the following information regarding decommissioning and restoring the site:

[1] The anticipated life of the project;

[2] The estimated decommissioning costs in current dollars;

[3] The method and schedule for updating the costs of decommissioning and restoration;

[4] The method of ensuring that funds will be available for decommissioning and restoration; and

[5] The anticipated manner in which the project will be decommissioned and the site restored.

(b) The Planning Board and/or the Town Board shall require the applicant to provide an appropriate and adequate demolition bond for purposes of removing the WECS facility in case the applicant fails to do so as required above. Proof of this bond shall be provided each year or at renewal time of any special permit.

(c) The sufficiency of the demolition bond shall be confirmed at least every five years by an analysis and report of the cost of removal and property restoration to be performed by a New York State licensed professional engineer, the cost of same to be borne by the applicant. If said analysis and report determines that the amount of the bond in force is insufficient to cover the removal, disposal and restoration costs, the bond shall be increased to the amount necessary to cover such costs within 10 days of the applicant's receipt of such report.

#### **§ 217-5. Additional special use permit requirements.**

Application. Every application for a special use permit shall be made, in writing, to the Town Board in accordance with the requirements of the Town, shall be accompanied by a

filing fee as set forth in the Town's Standard Schedule of Fees. Editor's Note: See Ch. 108, Fees. The special use permit application will include the following:

- A. Name and address of the applicant.
- B. Evidence that the applicant is the owner of the premises involved or that the applicant has written permission of the owner to make such an application.
- C. A plot plan and development plan drawn in accordance with § 217-4 and § 225-30D of the Town Code.
  - (1) Property line and physical dimensions of the proposed site;
  - (2) Location, approximate dimensions and types of major existing structures and uses of the site;
  - (3) Location and elevation of the proposed WECS;
  - (4) Where applicable, the location of all transmission facilities proposed for installation; and
  - (5) Where applicable, the location of all road and other service structures proposed as part of the installation.
- D. An environmental assessment form (full EAF) and visual EAF.
- E. Other information as requested by the Town Planning Board, and the Town Board.

#### **§ 217-6. Penalties for offenses.**

Any person who violates any provision of this chapter shall be guilty of a violation and subject to a fine of not more than \$250, imprisonment not to exceed 15 days, or both such fine and imprisonment.

#### **§ 217-7. Enforcement.**

The Town Code Enforcement Officer or his designee shall be provided access, at any time, to any WECS site for the purposes of ensuring compliance with this and any other applicable code. Such access shall be upon providing twenty-four-hour advance notification to the owner/operator of any such site.