

ZONING

190 Attachment 3

Village of Clyde

Appendix D

Wind Energy Systems

[Adopted 1-18-2007 by L.L. No. 1-2007]

Section 1. Purpose.

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

It is the purpose of these regulations to promote the safe, effective and efficient use of wind energy conversion systems.

Section 2. Scope.

This appendix shall apply to wind energy conversion systems used primarily to supply electrical power for on-site consumption only.

- A. Water-pumping windmills. Mechanically operated windmills utilized to pump water for on-site use shall conform to § 17 of this appendix.
- B. Wind farms. Wind farms, as defined in this appendix, shall be deemed prohibited in all zoning districts.

Section 3. Definitions.

ANEMOMETER — An instrument, usually located on a tower, that measures wind speed. This definition shall refer to such a device used to determine the viability of an area for development of a wind energy conversion system.

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

WIND FARM — A single wind energy conversion system or a collection of wind energy conversion systems that convert wind energy into electrical power for the primary purpose of sale, resale or off-site use.

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Section 4. Permits required.

No person, firm or corporation, being the owner or occupant of any land or premises within the Village of Clyde, shall use or permit the use of said land or premises for the construction of a wind energy conversion system, without first having obtained a special permit and site plan approval as provided herein.

Exception: Water-pumping windmills used for agricultural purposes in the R-1 District shall not require a special permit.

Section 5. Limitation of number of wind energy conversion systems per site.

The number of permitted wind energy conversion systems shall be limited to the number required for on-site energy consumption.

Section 6. Permit-application.

- A. All applications to construct a wind energy conversion system shall be made on forms provided by the Village of Clyde and subject to a special use permit issued by the Planning Board pursuant to Article VII of Chapter 190, Zoning.
- B. In addition to the requirements of Article VII, each application for a wind turbine shall be accompanied by a complete plan, prepared by a professional engineer licensed by the State of New York, drawn to scale, showing the location of the tower site; a landscape plan showing all existing natural land features, trees, forest cover and all proposed changes to these features including size and type of plant material; a drawing of applicant's and adjacent parcels showing existing structures; dimensions and size of various structural components of the tower's construction; design data which shall indicate the basis of design; soil type at construction site; and certification that the tower was designed to withstand wind load requirements for structures as set forth in the Building Code of New York State.
- C. If a WECS will be mounted on any preexisting structure, a structural analysis demonstrating compliance with the Building Code of New York State and certified by a licensed professional engineer shall be submitted as part of the permit application.
- D. The system shall comply with all applicable state and federal regulations, including Federal Aviation Administration and state/federal environmental requirements. A completed NYS environmental quality review-full environmental assessment form, including the visual assessment form, shall be submitted with the application. The Village of Clyde Planning Board shall act as lead agency for this SEQR review.
- E. Appropriate documentation shall be submitted to demonstrate that the proposed wind energy conversion systems is either: (1) listed on the NYSERDA list of Qualified Wind

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Generators, or (2) otherwise certified by a nationally or internationally recognized testing laboratory to meet industry standards for safety and performance.

- F. All applications for the construction of a tower to be used to derive energy shall be referred to the Planning Board for site plan approval under the procedures set forth in Article VII of the Zoning Law. In granting site plan approval, the Planning Board may impose conditions and restrictions deemed necessary for the maintenance, safety of such towers, and/or to preserve and protect the character of the neighborhood and the health, safety and welfare of the community.

Section 7. Site plan standards.

The following standards shall be used to guide the review of applications for all WECS:

- A. Towers shall typically be located or placed in rear yards.
- B. Guy wires and anchors for towers shall be located no closer than 10 feet from any property line. Additionally, all guy wires must be marked and clearly visible to a height of 10 feet above the guy wire anchors. Guy wire anchor points shall be located within property lines and not on or across any aboveground electric transmission or distribution line.
- C. Neutral paint colors may be required to achieve visual harmony with the surrounding area.
- D. All WECS shall be set back from property lines, public roads, power lines, and any pre-existing and future structures by a distance at least equal to the height of the tower plus blade length, plus 25 feet. Additional setbacks may be required by the Planning Board in order to provide for the public safety, health and welfare.

Section 8. Noise level.

The level of noise produced during operation of the WECS shall not exceed the ambient nighttime level at any neighboring residential structure and 10 DBA above ambient measured at the property line, except during short-term events such as utility outages and severe windstorms. The applicant must provide evidence that the installation will meet these noise requirements.

Section 9. Height limitations.

- A. It is recognized that WECS require greater heights to reach elevations with wind currents reasonably adequate to generate energy. Towers shall not exceed a total height of 50 meters (164 feet) from the ground to the top of the tower (center of hub), provided that the application includes evidence that the proposed height does not exceed the height recommended by the manufacturer or distributor of the system.

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- B. The minimum clearance between the ground and any part of the rotor blade must be 30 feet (9.2 meters).

Section 10. Energy shutdown/safety.

- A. Applicant shall post an emergency telephone number so that the appropriate people may be contacted should any WECS need immediate attention. This telephone number shall be clearly visible on a permanent structure(s) or post(s) located outside the fall zone of the tower. The location should be convenient and readily noticeable to someone likely to detect a problem (example: adjacent to a public way).
- B. No WECS shall be permitted which lacks automatic braking, governing, or feathering system to prevent uncontrolled rotation, over speeding, and excessive pressure on the tower structure, rotor blades, and turbine components or enclosed shelter.
- C. WECS towers shall have lightning protection.
- D. At least one sign shall be posted at the base of the WECS tower warning of electrical shock or high voltage.

Section 11. Lighting.

A WECS tower shall not be artificially lighted except as necessary to assure human safety as required by the Federal Aviation Administration (FAA).

Section 12. Utility service.

All power lines from the WECS to on-site interconnection equipment shall be underground.

Section 13. Access road.

Existing roadways shall be used for access to the site whenever possible. In the case of constructing roadways, they shall be constructed in a way so that it allows for passage of emergency vehicles in the event of an emergency.

Section 14. Security.

The WECS tower shall not be readily climbable by the public for a minimum height of 15 feet from the ground. Security measures to prevent climbing shall be specifically approved by the Planning Board.

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Section 15. Abandonment.

The applicant shall submit to the Planning Board a letter of intent committing the WECS or anemometer owner, and his/her successors in interest, to notify the building inspector within 30 days of the discontinuance of use of the WECS or anemometer. This letter of intent shall be filed with the building inspector prior to the issuance of a building permit. The owner shall remove the abandoned, obsolete or unused WECS, anemometer and accessory structures within six months of such notification. Failure to notify and/or remove the obsolete or unused WECS in accordance with these regulations shall be a violation of this appendix. The Village may institute proceedings to remove said WECS, and the cost of removing the WECS and accessory structures, including legal fees, shall be placed as a lien on the property as provided for in Chapter 67, § 67-13G(1), of the Code of the Village of Clyde.

Exception: WECS or anemometers which have become unsafe shall be deemed a dangerous building and abated as provided for in Chapter 67, § 67-13, of the Code of the Village of Clyde.

Section 16. Public hearings.

No action shall be taken by the Planning Board to issue a special use permit, to issue preliminary site plan approval, nor to recommend granting a use and area variance until after public notice and hearing. Proper notice of a hearing before a board shall be given by legal notice published in the official newspaper of the Village of Clyde at least five days before the date set for a public hearing and written notice mailed to the applicant or his agent at the address given in the application to be considered. The applicant shall be responsible for notifying by certified mail all the property owners of record within 300 feet of the outside perimeter or boundary line of property involved in the preliminary application of the time, date and place of such public hearing by mail at least 10 days prior to such hearing. Notice shall be deemed to have been given if mailed to the property owner at the tax billing address listed on the property records of the Town Assessor or at the property address. At least seven days prior to such hearing, the applicant shall file with the board his/her affidavit verification of mailing such notice. Failure of property owners to receive such notice shall not be deemed a jurisdictional defect.

Section 17. Water-pumping windmills.

Windmills used for water pumping only shall be located so that tip-over will be harmless to other structures or above-ground utility lines. Such windmills shall not exceed the maximum permitted height for principal structures for the district in which they are located.

Section 18. Anemometers.

The construction of an anemometer is permitted in all zoning districts upon issuance of a temporary permit by the Planning Board. Said permit shall expire 15 months from the date of issuance, and shall be renewable once only.

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Section 19. Enforcement.

Any violation of this chapter, or any order, requirement decision or determination issued by the Code Enforcement Officer or Planning Board pursuant to this chapter is hereby declared to be a violation of Chapter 190, Zoning.

Section 20. Effective date.

This chapter shall take effect immediately upon filing with the Secretary of State.