

LOCAL LAW NO. XXX-2010 TO ADOPT AND IMPLEMENT CHAPTER XXX
ENTITLED "WIND ENERGY CONVERSION SYSTEMS" OF THE TOWN CODE OF
THE TOWN OF SWEDEN

BE IT ENACTED, by the Sweden Town Board, Monroe County, State of New York,
as follows:

175-XX. Authorization

This law is enacted pursuant to the legislative authority at New York Municipal Home Rule Law Section 10, and has been duly adopted according to the procedures set forth therein.

175-XX. Title

This law shall be known as the Town of Sweden "Wind Energy Conversion Systems" Code and may be cited as Local Law No. XXX-2010 of the Town of Sweden.

175-XX. Purpose and Intent

The Town of Sweden recognizes the increased demand for alternative energy-generating facilities and the corresponding need for more inexpensive power that wind energy conversion facilities (wind turbines) may provide. Often these facilities require the construction of single or multiple wind turbines. The purpose of this local law is to implement Chapter XXX entitled "Wind Energy Conversion Systems" in order to regulate the use of wind turbines within the Town of Sweden by, among other things, protecting the community's interest in properly siting wind turbines in a manner consistent with sound land planning, and more generally to promote the government, protection, order, conduct, safety, health and well-being of the persons and property within the Town of Sweden.

175-XX. Applicability

The requirements of this Law shall apply to all Wind Energy Facilities proposed, operated, modified, or constructed after the effective date of this Law.

175-XX. Findings

Based on the recommendations of the Wind Tower Study Committee, a committee created by Local Law #X-2010, the Town Board finds that:

- A. Wind energy is an abundant, renewable, and nonpolluting energy resource of the Town of Sweden and its conversion to electricity may reduce dependence on nonrenewable energy sources and decrease the air and water pollution that results from the use of conventional energy sources.
- B. The generation of electricity from properly sited wind turbines has the potential to tie into existing power distribution systems allowing for the transmission of electricity from wind generation stations to utilities or other users, or alternatively may be used to reduce or eliminate on-site consumption of energy.
- C. Regulation of the siting and installation of wind turbines is necessary for the

purpose of protecting the health, safety, and welfare of neighboring property owners, the environment, and the general public. Wind Energy Conversion Systems need to be consistent with the Town of Sweden Zoning Code and the Town of Sweden Comprehensive Plan.

- D. Wind Energy Conversion Systems may represent significant potential issues because of their size, environmental impacts, and safety effects such as: noise, lighting/ shadow effects, risks to avian species, blade and ice throw, tower toppling, or communications. The installation of Wind Energy Conversion Systems may change the landscape and appearance of the Town of Sweden.
- E. Wind Energy Conversion Systems may present risks to the property values of adjoining property owners.

175-XX. Definitions

- A. The following rules of construction of language shall apply to the text of this chapter:
 - 1) Words used in the present tense include the future tense.
 - 2) Words used in the singular include the plural, and words used in the plural include the singular.
 - 3) The word "person" includes an individual, firm or corporation.
 - 4) The word "shall" is always mandatory; the word "may" is always permissive.
- B. Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter it's most reasonable application.
- C. In cases where words or phrases are not defined in this chapter but are defined elsewhere in the Sweden Code, the words or phrases shall have the meaning set forth elsewhere in the Code.
- D. In the event of a conflict, the definitions in this chapter shall control.
- E. When used in this chapter the following terms shall have the respective meanings set forth herein, except where the context shows otherwise.

ALTERNATIVE ENERGY SYSTEMS: Structures, equipment, devices or construction techniques used for the production of heat, light, cooling, or electricity or other forms of energy on-site and may be attached to or separate from the principal structure. Current examples include windmills, solar collectors and solar green houses, heat pumps or other related devices.

APPLICANT, DEVELOPER, OPERATOR or OWNER: As used in this chapter, the terms Applicant, Developer, Operator and Owner may, where appropriate, be interchangeable and will be interpreted to give the most reasonable and logical application to the provision(s) containing one or more of these terms.

AS BUILT: When construction conditions require changes to contract drawings they are so noted and described on final drawings of record.

AVERAGE AMBIENT NOISE LEVEL: The level of acoustic noise existing at a given location out of doors for 24 hours a day, 7 days a week, for duration of four weeks. See Sound Pressure Measurement.

DEVELOPER: See “APPLICANT, DEVELOPER, OPERATOR or OWNER”.

ELECTRONIC AND ELECTRONIC MAGNETIC INTERFERENCE: Interference to satellite towers, microwave transmissions, cell communication towers and “ghosting” of television reception caused by electronic reflections of electrical generating facilities.

ESSENTIAL SERVICES AND PUBLIC UTILITIES: Erection, construction, operation, or maintenance by municipal agencies or public utilities of telephone dial equipment centers, electrical or gas substations, water treatment or storage facilities, pumping stations and similar facilities, but shall not include telecommunication facilities as defined herein, and shall not include wind energy facilities (including infrastructure supporting wind energy facilities), landfills, waste transfer stations or other facilities with the primary purpose of handling or disposing of household or industrial waste.

FALL ZONE (FOR WIND ENERGY SYSTEMS): A distance of two times (200%) the Wind Energy Conversion System height as measured as a vertical distance from the pre-construction or post construction grade, whichever is lower, at the tower base to the highest point (apex) of the rotor blade.

GLOBAL POSITIONING SATELLITE (GPS): Satellite placed, monitored by governments, to accurately reference electronically, instrument locations on the earth’s surface.

GROUND CLEARANCE: The minimum distance between the lowest point of the rotor blade rotation and ground at the base of a tower.

HUB HEIGHT: Center of rotational axis of rotor blades and gearbox (nacelle).

INDUSTRIAL WIND ENERGY FACILITY: Shall be considered to be the same as Industrial WECS and regulated as such.

LICENSED: Unless provided otherwise, any reference to a licensed engineer, licensed surveyor, licensed architect or licensed landscape architect shall mean that the person is currently licensed for his or her profession by the State of New York.

METEOROLOGICAL TOWERS: (also referred to as MET Towers) any commercial equipment and tower used to collect atmospheric data such as temperature, wind speed and direction.

NACELLE: Large enclosure placed at the top of supporting tower, housing equipment such as the generator, gearbox, drive train, rotor blades and hub and breaking system.

NET-METERING: An exchange of excess electricity between owner of generating facility and utility company. The utility company may accept over generation beyond the owner's needs and allows the metering system to reverse spin, thereby crediting the producer under an interconnection agreement.

OFF GRID: Wind System not connected to power grid.

OPERATOR. See "APPLICANT, DEVELOPER, OPERATOR or OWNER" above.

ON GRID: Wind System connected to power grid.

OVERLAY DISTRICT: A district that encompasses one or more underlying districts and imposes additional requirements above that required by the underlying district.

OWNER: See "APPLICANT, DEVELOPER, OPERATOR or OWNER" above.

PILOT PROGRAM: (Payment In Lieu of Taxes) a program implemented as replacement of revenue lost to towns by State of New York Tax Exemption Law for renewable energy systems (Real Property Tax Law 487).

SHADOW FLICKER: The effect of sunrays passing through the rotating blades of a wind energy generating system, which is similar to the effect of strobe lighting.

SPECIAL USE PERMIT: Sometimes referred to elsewhere in the Sweden Code as a "Special Permit".

STANDARD INTERCONNECTION AGREEMENT: Agreement between local producer and Utility Company.

SOUND PRESSURE LEVEL OR SOUND LEVEL (dBA): A logarithmic measurement of sound pressure (sound level) fluctuation produced by a particular source of sound as compared to a reference (background) sound pressure level. Sound pressure shall be expressed in decibels, using A-frequency weighting (dBA), which is the most commonly used standard in the United States for the measurement of environmental noise. With human hearing, low and high frequency sounds appear to be less loud. A-weighting (A-frequency weighting) reduces the level of low and high frequencies to produce a reading that corresponds approximately to what humans hear. The measurement of sound pressure levels shall be performed in accordance with the latest revision of International Standards for acoustic noise measurement techniques for Wind Turbine Generator Systems (IEC 61400-11) or other industry accepted procedures.

TOTAL HEIGHT: (also TIP HEIGHT or MAXIMUM OVERALL HEIGHT)
The vertical distance from the pre-construction or post construction grade, whichever is lower, at the tower base to the highest point (apex) of the rotor blade.

TOWER: The support structure, including guyed, monopole and lattice types, upon which a wind turbine, nacelle, generator and other mechanical and electrical devices are mounted.

TOWER HEIGHT: The vertical distance from the pre-construction or post construction grade, whichever is lower, at the tower base to the center of the horizontal axis of the rotor blade.

TRANSFORMER: An electrical device used to change voltages.

TRANSMISSION LINES: Conductive lines required delivering derived power to the electrical grids.

VERTICAL AXIS WIND TURBINE: (also VAWT) One or more mechanical devices, such as wind turbines, with multiple caged blades which are designed and used to convert the kinetic energy of wind into a usable form of energy. The turbine rotates on a vertical axis. The VAWT includes all parts of the system except the tower and transmission equipment.

WIND ENERGY OVERLAY DISTRICT: A zoning overlay district which encompasses part or parts of one or more underlying districts and establishes requirements limited to Industrial Wind Energy Conversion Systems.

WIND ENERGY FACILITY: Any Wind Energy Conversion System, including Industrial Systems, Residential Systems, or Meteorological Towers (MET Towers), including all related infrastructure, electrical lines and substations, access roads, and accessory structures.

WIND ENERGY CONVERSION SYSTEM: The equipment that converts and then stores or transfers energy from the wind into usable forms of energy and includes any base, blade, foundation or support, generator, infrastructure, nacelle, rotor, tower, transformer, turbine, vane, wire, substation, or control facilities or other components used in the system. The turbine or windmill may be on a horizontal or vertical axis. A wind energy conversion system may consist of one or more wind turbines.

A-RESIDENTIAL WIND ENERGY CONVERSION SYSTEM: (Residential WECS) A wind energy conversion system (WECS) consisting of one wind turbine, one tower, and associated control or conversion electronics and delivery system which has a total height over 36 feet but, no greater than one hundred (100) feet with a rated output that is less than or equal to 10 kilowatts.

B-INDUSTRIAL WIND ENERGY CONVERSION SYSTEM: (Industrial WECS) A wind energy conversion system (WECS) consisting of one wind turbine, one tower, and associated control or conversion electronics and delivery system which has a total height of greater than 100 feet but no greater than two hundred (200) feet with a rated output that is less than or equal to 1.5 MW.

175-XX. RESIDENTIAL ENERGY CONVERSION SYSTEM
(Over 36 feet and up to or equal to 100 feet)

A. GENERAL

1. The placement, construction, and major modification of all Residential Wind Energy Conversion Systems (Residential WECS) within the boundaries of the Town of Sweden shall be permitted only by Special Use Permit.
2. Residential Wind Energy Conversion Systems shall require a site plan review and approval by the Planning Board, a Special Permit issued by the Planning Board and a Building Permit issued by the Code Enforcement Officer per Article XX of the Town of Sweden Zoning Code.
3. The Special Use Permit shall be valid initially for five (5) years. Renewal shall be required every (5) years.
4. The applicant shall pay all costs associated with the Town of Sweden’s review and processing of the application.
5. If required by NYS Municipal Law, the application will be referred to the Monroe County Planning Department for review.
6. Residential WECS are permitted in any zoning district when meeting fall zone requirements.
7. Residential WECS shall be placed or located behind the front setback of the residence or 100 ft from the right-of-way, whichever is less. At no time shall electricity be distributed across property lines except to tie into the electrical grid system.
8. All interconnecting lines and wires from generators to ground ancillary structures and utility transmission grid will be installed underground to the maximum extent practicable. The Planning Board shall have the authority to waive this requirement only if the Planning Board has sufficient engineering data submitted by the applicant to demonstrate that underground transmission lines are unfeasible.

B. APPLICATION

1. Upon submittal of an application the Planning Board shall, within thirty (30) days of receipt, or such longer time if agreed to by the applicant, determine if all information required under this application is included in the application. No application shall be acted on by the Planning Board until the application is deemed complete by the Planning Board.
2. An Application for a Residential WECS shall include the following:
 - a. Applications shall include product information from the manufacture of the proposed wind turbine or rotor blade, tower, supporting foundations,

- anchorage, inverter, structures and transmission lines as a composite.
- b. Name, address and telephone number of the applicant. If the applicant is represented by an agent, the application shall include the name, address and telephone number of the agent as well as an original signature of the applicant authorizing the representation.
 - c. Name, address and telephone number of the property owner. If the property owner is not the applicant, the application shall include a letter or other written permission signed by the property owner confirming that:
 - 1) The property owner is familiar with the proposed application.
 - 2) The property owner authorizes the submission of the application.
 - c. Provide a comprehensive description of the residential WECS, including location, total height of the tower, maximum rated capacity of the wind turbine and the utilities required.
 - d. The following information is required for the Planning Board.
 - 1) Title block showing the drawing title, date of preparation, name and address of applicant, name and address of the person or firm preparing the drawing, and the signature and seal of a licensed Professional Engineer and licensed Land Surveyor.
 - 2) Site location map, including north arrow and bar scale.
 - 3) Boundaries and physical dimensions of the site in sufficient scale to verify setbacks.
 - 4) Existing watercourses and bodies of water, including any state and federal wetlands.
 - 5) Public and private roads within one hundred (100) feet of the site boundaries.
 - 6) Existing residential and non-residential structures and driveways located on-site.
 - 7) Existing residential and non-residential structures located off-site and within five hundred (500) feet of the site boundaries.
 - 8) Location of the proposed tower, equipment, foundations, guy points, substations, accessory structures, fences and any other amenities.
 - 9) Existing and proposed above ground and underground utilities located on the site.
 - 10) Shall present construction plan detailing access routes, on site disturbance of landscape, trees, soils and restoration thereof at completion of facility erection period.
 - 11) A circle drawn to scale around the tower which includes the fall zone equal to 200% of rotor blade height at apex.
 - e. The applicant may be required to include scaled engineering drawings certified by a licensed Professional Engineer which show details and dimensions of the following:
 - 1) Tower
 - 2) Turbine
 - 3) Foundation
 - 4) Distance between ground and the lowest point of any rotor blade.
 - 5) Height and location of climbing pegs and ladders.

- 6) Fencing and the color and finish of each major component.
- 7) Details and dimensions of all proposed equipment, accessory structures, access roads and driveways.
- f. The Application shall include a full SEQR Environmental Assessment Form (EAF) with Part 1 prepared by the applicant and also an EAF Addendum (from SEQRA Part 617.20, Appendix B).
- g. If required by Section 283-a of New York Town Law or Section 305-a of New York Agricultural and Markets Law, the applicant shall submit an Agricultural Data Statement.
- h. Any such agreement shall be subject to the review and approval of the Town Attorney or the Attorney advising the Planning Board and approved by resolution of the Town Board.
- i. Applications shall include a written agreement in which the applicant agrees to provide and pay for average ambient noise level and sound pressure level testing, and or shadow flicker analysis as required by the Planning Board. Testing may be requested at any time during the term of a special permit to ensure compliance or to resolve noise or visual complaints received from nearby property owners. Any such agreement shall be subject to the review and approval of the Town Attorney or the Attorney advising the Planning Board.

C. STANDARDS FOR RESIDENTIAL WIND ENERGY CONVERSION SYSTEMS

1. The Tower Design must be certified by a licensed Professional Engineer.
2. The Tower Height shall comply with all applicable Federal Aviation Administration requirements.
3. Ground clearance of horizontal axis rotor blades shall not be less than twenty-five (25) feet.
4. Wind turbine towers and any guy wire systems shall not be climbable for the first twelve (12) feet above ground level.
5. The proposed site shall include a fall zone radius of no less than 200% of total tower height to any property line.
6. The proposed site shall include a fall zone radius of no less than 200% of total
The fall zone shall not:
 - a. Include public or private roads.
 - b. Be located on or across any above ground electrical transmission or distribution lines.
8. No tower shall be lit except to comply with FAA requirements. Minimum security lighting for ground level facilities shall be allowed as approved on the site plan. Security lighting shall be designed to minimize light pollution, including the use of light hoods, low glare fixtures, and directing lights at the ground.

9. The system's tower, nacelle, and blades shall be painted a non-reflective, unobtrusive color that blends the system and its components into the surrounding landscape to the greatest extent possible and incorporates non-reflective surfaces to minimize any visual disruption.
10. All Horizontal Axis WECS shall be equipped with electro-magnetic and manual brake controls to limit the rotational speed of the rotor blade so it does not exceed the design limits of the rotor and over stress the tower and components. Vertical axis wind turbines shall be controlled to prevent over speed, and exceeding the design limits of the rotor, support structure, and other components.
11. All on-site electrical wires associated with the system shall be installed underground, whether net-metered or a standalone system, except for "tie-ins" to a public utility company and public utility company transmission poles, towers and lines. This standard may be modified by the Planning Board if the project terrain is determined to be unsuitable due to reasons of excessive grading, biological impacts, or similar factors.
12. The daytime statistical sound pressure level generated by a Residential WECS shall not exceed 10dBA over the pre-existing daytime average ambient as measured at the off-site property line or 50dBA, whichever is less. Daytime hours are defined as 6:00 AM EST to 11:00 PM EST. The nighttime statistical sound pressure level generated by a residential WECS shall not exceed 10dBA over the pre-existing nighttime average ambient as measured at the off-site property line or 35dBA, whichever is less. Nighttime hours are defined as 11:00 PM EST to 6:00 AM EST. Residential WECS shall not operate at an impulsive sound below 20 Hz at the off-site boundary line.
13. If it is determined that a Residential WECS is causing electromagnetic interference, the operator shall take necessary corrective action to correct this interference, including relocation or removal of the facilities, or resolution of the issue with the impacted parties.
14. No brand names, logos, antennas, or advertising shall be allowed on any part of the facility or placed or painted on the tower, rotor, generator or tail vane where it would be visible from the ground, except that a system or tower's manufacturer's logo may be displayed on the system generator housing in an unobtrusive manner. However, permanent identification of manufacturer and responsible contact information in case of failure or malfunction will be mounted on the tower base.
15. Access roads required for construction shall be adequate to support weight of trucks, erection cranes, facility sections and heavy construction equipment. The applicant is responsible for remediation of damaged roads during construction and upon completion of the installation or maintenance of a WECS.

16. The applicant is required to obtain all necessary regulatory approvals and permits from all federal, state, county, and local agencies having jurisdiction and approval related to the completion of the WECS.

XXX-10 Penalties; Abatement; Limitations; Bonds; Funds and Remedies for Violations for Residential WECS

A. PENALTIES

Any person owning, controlling, or managing any building, structure, or land who shall construct, operate or maintain a Residential Wind Energy Conversion Facility in violation of this Chapter or in noncompliance with the terms and conditions of any permit issued pursuant to this Chapter, or any order of the code enforcement officer, and any person who shall assist in so doing, shall be guilty of an offense and subjected to:

1. For a first offense, a fine of not more than \$100.00.
2. For a second offense (both within a period of five (5) years), a fine of not less than \$100.00 or more than \$250.00.
3. For a third offense (all within a period of five years), a fine of not less than \$250.00 per day or more than \$1,000.00 per day.
4. If multiple units in one facility have the same or similar violations, each shall be considered as a separate and distinct violation.
5. In case of any violation or threatened violation of any of the provisions of this Chapter, including the terms and conditions imposed by any permit issued pursuant to this section, in addition to other remedies and penalties herein provided, the Town of Sweden may institute any appropriate action or proceeding to prevent such unlawful erection, structural alteration, reconstruction, moving, and or use, and to restrain, correct, or abate such violation, to prevent the illegal act.

B. REMOVAL

1. Public Nuisance

Every unsafe, incomplete, abandoned, or inoperable Wind Energy Facility is hereby declared a public nuisance which shall be subjected to abatement by repair, rehabilitation, demolition, or removal.

2. If any WECS remains non-functional or inoperative for a continuous period of six months, the applicant agrees that, without any further action by the Town Board, it shall remove said system and return the land to pre-existing conditions at its own expense. Removal of the system shall include but not limited to:
 - a. All above ground structures including support buildings, transmission equipment, and fencing from the property.
 - b. Removal of the concrete base of a wind turbine to a depth of not less than five (5) feet below grade elevation.
3. This provision may be waived at the discretion of the Planning Board if the applicant demonstrates to the Planning Board that it has been making good

faith efforts to restore the WECS to an operable condition, but nothing in this provision shall limit the Planning Board's ability to order a remedial action plan after a public hearing.

4. Notwithstanding any other abatement provisions, if the WECS is not repaired, made operational, or brought into permit compliance after said notice, and after a public meeting at which time the operator or owner shall be given opportunity to be heard and present evidence, including a plan to come into compliance, the Town may:
 - a. Order either remedial action within a particular timeframe.
 - b. Or order revocation of the Special Use Permit for the WECS and order removal of the WECS within Ninety (90) days.

175-XX. INDUSTRIAL ENERGY CONVERSION SYSTEMS AND WIND SITE ASSESSMENT EQUIPMENT

WIND SITE ASSESSMENT

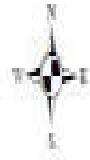
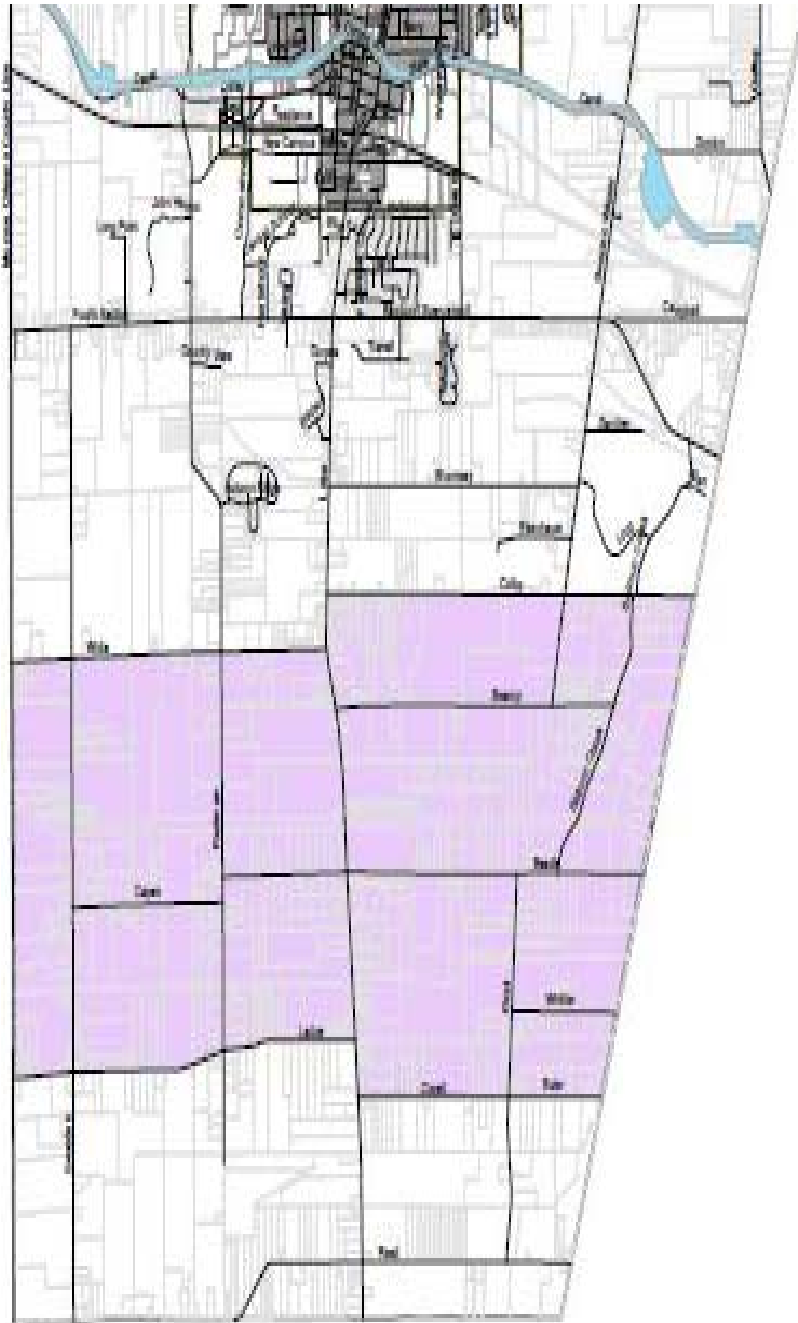
A. Meteorological Towers (MET)

Prior to construction of a WECS, if an assessment of local wind speeds and the feasibility of using particular sites are desired, installation of MET Towers shall be permitted upon the Planning Board issuing a Special Permit. The standards for the Special Permit shall be those set forth in Article 175-10 of the Sweden Zoning Code.

175-XX. WIND ENERGY OVERLAY DISTRICT

A. WIND ENERGY OVERLAY DISTRICT

- 1) Industrial WECS and/or METS up to 200 feet are allowed in the Town of Sweden's Wind Energy Overlay District.
- 2) The Town of Sweden's Wind Energy Overlay District shall be defined by the:
 - a) Northern points of Colby Street and White Road
 - b) Southern points of Euler road, Covell Road and LaDue Road
 - c) Western point of Monroe Orleans County Line
 - d) Eastern point of the Sweden Town line.
- 3) Please reference attached map.



Town Of Sweden

Legend

- SWEDEN ROADS
- Town/Village Boundaries
- NAME**
- Brockport
- Sweden
- Windtower Zone

175-XX INDUSTRIAL WIND ENERGY CONVERSION SYSTEMS (INDUSTRIAL WECS) AND METEOROLOGICAL TOWERS (METS)

A. GENERAL PROVISIONS

1. No Industrial WECS and/or METS shall be constructed, reconstructed, modified, or operated in the Town of Sweden except in compliance with this section.
2. No Industrial WECS and/ or METS shall be constructed, reconstructed, modified, or operated in the Town of Sweden, except in the Wind Energy Overlay District.
3. The placement, construction, and major modification of all Industrial WECS and/or METS within the boundaries of the Town of Sweden shall be permitted only by Special Use Permit issued by the Planning Board.
4. Industrial WECS and/or METS are permitted only in the Wind Energy Overlay District.
5. Fall zones shall be a minimum of Two (200%) times the tower height as measured from the apex of the rotor blade to the base of the tower.
6. Multiple towers may be sited on a contiguous property and on legally leased adjacent parcels.
7. The applicant shall pay all costs associated with the Town of Sweden's review and processing of each application. The applicant shall submit a deposit with the application in the amount as determined by resolution by the Town Board. The Town of Sweden may require the applicant to enter into an escrow agreement to cover the anticipated engineering and legal costs of reviewing and processing all applications.
8. The applicant shall submit a decommissioning plan, which shall include:
 - a. Anticipated life of the WECS and/or METS.
 - b. Estimated decommissioning costs in current dollars.
 - c. How said estimate was determined.
 - d. Any decommissioning deposit as required by Sweden Town Board and the method of ensuring funds will be available for decommissioning and restoration.
 - e. The manner in which the WECS and/or METS will be decommissioned and the Site restored.
 - f. The decommissioning plan costs shall not be offset by the salvage values.
9. The Town of Sweden, as permitted by New York State Real Property Tax Law (RPTL) Section §487 (8), elects to eliminate any exemption granted to any wind farm, WECS and/or METS constructed after the effective date of this Local Law.
10. Prior to the issuance of a building permit, the applicant shall provide the Town of Sweden with proof of insurance in a sufficient dollar amount to cover potential personal and property damage associated with the construction and operation

thereof. The Town of Sweden shall be named as additional insured party. Proof of insurance shall be submitted annually to the Town.

11. Prior to the receipt of a building permit the Applicant and the Utility shall have a Standard Interconnection Agreement (SIA) from the Federal Energy Regulatory Commission.
12. The applicant is responsible for remediation of dedicated roads damaged by the construction and maintenance of an Industrial WECS and/or METS. A public improvement bond or other financial security, the amount thereof to be approved by the Town Board and the bond approved by the Town Attorney as to form, sufficiency and manner of execution.
13. The Town of Sweden shall be named as an additional insured under the general liability policy of the applicant, with an amount no less than an amount to be determined by the Town Board given the nature and scope of the project.

B. APPLICATION FOR INDUSTRIAL WECS AND METS

1. MET data is used to evaluate the feasibility of installing Industrial Wind Energy Conversion Systems (Industrial WECS).
2. Applicants shall request a pre-application meeting(s) with the Planning Board, Building Department, Town Attorney, Town Engineer, and with any consultants retained by the Town for preliminary application review.
3. Upon submittal of an application, the Planning Board shall, within 30 days of receipt, or such longer time if agreed to by the applicant, determine if all information required under this application is included in the application. No application shall be acted on by the Planning Board until the application is deemed complete by the Planning Board.
4. An Application for a Industrial WECS and/or METS shall include the following:
 - a. Name, address, and telephone number of the applicant. If the applicant is represented by an agent, the application shall include the name, address and telephone number of the agent as well as an original signature of the applicant authorizing the representation. The application shall include a certified list of individual and corporate officers of the applicant and their responsibilities to this project.
 - b. Name, address, and telephone number of the property owner. If the property owner is not the applicant, the application shall include a letter or other written permission signed by the property owner confirming that:
 - 1) The property owner is familiar with the proposed application.
 - 2) The property owner authorizes the submission of the application.
 - c. Proof of ownership of involved properties or long-term leases, legally executed and filed with the Monroe County Clerk.

- d. Address or other property identification of each proposed tower location, including Tax Map section, block and lot number with Global Positioning Satellite (GPS) location of each proposed wind tower and related structure.
- e. A plot plan with a minimum scale of one (1) inch = four hundred (400) feet prepared by licensed Professional Engineer, stamped and dated to include:
 - 1) Sufficient Copies of the Drawing Package as determined at the pre-application meeting.
 - 2) North arrow, bar scale and location map.
 - 3) Property Lines and physical dimensions of the site provided by a licensed land surveyor.
 - 4) Topography by one foot (1 ft.) contours.
 - 5) The applicant shall include an existing Site Plan and proposed Site Plan to include all roadways, fields, ponds, lakes, water courses, wetlands, residences, buildings, structures, historical sites, cemeteries, bridges or culverts, water wells, sewage systems, crop land and wood land by lot, block and tax identification number.
 - 6) Location of public roads, adjoining properties including property owners' names, schools, hospitals, and public buildings within two-thousand five hundred (2500) feet of the boundaries of the proposed Industrial WECS and/or METS Site.
 - 7) Each Industrial WECS and/or METS clearly referenced including location and elevation.
 - 8) To demonstrate compliance with fall zone and set back requirements, circles are to be drawn around each proposed tower location equal to:
 - (a) Two (200%) times the tower height as measured from the apex of the rotor blade to the base of the tower.
 - (b) Circles with a 10 diameter rotor radius.
 - (c) Circles with a two-thousand (2,000) foot radius.
- f. A Construction Plan sequential by site designation, estimated dates and duration of construction displaying access/egress roads for delivery of construction equipment, staging areas, parking areas for receiving and off loading of materials and structural components. No parking on public roads or streets shall be permitted.
- g. Documentation of existing road, culvert infrastructure. A pre-construction survey to be performed for the purpose of determining damage, and supplied to the Planning Board and Town of Sweden Highway Department.
- h. Vertical drawing of the Industrial WECS and/ or METS showing total height, turbine dimensions, tower and turbine colors, ladders, distance between ground and lowest point of any rotor blade, location of climbing pegs, and access doors. One drawing may be submitted for each Industrial WECS of the same type and total height.
- i. Landscaping Plan depicting existing vegetation and describing any areas to be cleared and all specimens to be added, identified by species and species size at installation with their location.
- j. Lighting Plan: The applicant shall submit a lighting plan that describes all lighting. Such plan shall include, but is not limited to, the planned number and location of lights, lighting that may be required by the FAA including, a

copy of the FAA lighting determination, types of light, whether any such lights will be flashing, and mitigation measures planned to control the light so not to spill over onto neighboring properties

- k. Adjacent Property Owners: A list of all adjacent property owners of land within two-thousand five hundred (2500) feet as measured from the tower base to non-participating property lines shall be provided to the Planning Board for review and record retention. The list shall contain the names, property addresses, mailing address and tax map numbers of the property owners.
- l. Decommissioning Plan: The applicant shall submit a decommissioning plan which shall include:
 - 1) The anticipated life of the Industrial WECS and/or METS.
 - 2) The estimated decommissioning cost in current dollars.
 - 3) How said estimate was determined including the amount the cost is offset with salvage value.
 - 4) A cash deposit will be the required method, and held for 3 years for ensuring that the funds will be available for decommissioning and restoration.
 - 5) The Operator shall pay for costs incurred for the method, such as annual re-estimate by an independent licensed Professional Engineer or Qualified Estimator approved by the Town, by which the decommissioning cost will be kept current.
 - 6) The manner in which the Industrial WECS and/ or METS will be decommissioned and the site restored and shall include the following:
 - (a) Removal of wind turbines and associated ancillary equipment.
 - (b) Removal of substations and associated ancillary equipment.
 - (c) Removal of the concrete base of the wind turbine to a depth of not less than five (5) feet and restoration of affected land to pre-construction grade.
 - (d) Removal of buried cables if less than five (5) feet in depth.
 - (e) A pre-decommissioning survey, to be performed by an independent third party, of roads, culverts and bridges and affected land. The survey shall include photo and/or video documentation.
 - i. Removal of access roads and restoration of affected land.
 - (f) Widening of roadways if necessary for heavy equipment and final restoration of all roadways used during removal.
 - (g) Restoration of vegetation (consistent and compatible with surrounding vegetation) less any fencing or minor improvements requested by the landowner.
- m. The application shall include information relating to the construction, installation and repair of the Wind Energy and/or METS as follows:
 - 1) Construction schedule describing anticipated commencement and completion dates.
 - 2) Hours of operation.
 - 3) Designation of heavy haul routes.

- 4) A list of materials, equipment and loads to be transported.
 - 5) Identification of temporary facilities intended to be constructed, and representatives in the field with name and phone number(s).
 - 6) Specific turbine information on the type, size, height, rotor material, rated power output, performance, safety, and noise characteristics of each wind turbine model, tower, and electrical transmission equipment.
 - 7) Method of delivery, both short and long term storage, and the method of removal from the Site of large components for repairs which may become the normal course of operation of the WECS and or METS over its operational life.
 - 8) The amount of farm land removed from use during the construction period and after completion of the Industrial WECS and/or METS facility.
- n. SEQRA Review:
- 1) Applications for Industrial WECS and/or METS are deemed Type 1 projects under SEQRA. The town may conduct its SEQRA Review in conjunction with other agencies, in which case the records of review by said agencies shall be part of the record of the Town of Sweden's proceedings. The SEQRA shall also include a Visual EAF Addendum (from SEQRA Part 617.20, Appendix B).
 - 2) At the completion of the SEQRA Review process, if a positive declaration of environmental significance has been issued and an environmental impact statement prepared, the Planning Board shall issue a Statement of Findings. The Statement of Findings may also serve as the Planning Board's decision on the application.
- o. Agricultural Data Statement: If required by Section 283-a of New York Town Law or Section 305-a of New York Agricultural and Markets Law, the applicant shall submit an Agricultural Data Statement.
5. Wind Energy studies: The reviewing board may require some or all of the following studies. Where applicable these studies shall comply with NYSDEC Visual and noise Assessment and Mitigation Guidelines
- a. Meteorological data
 - b. Shadow flicker
 - c. Visual impact
 - d. Property value analysis
 - e. Fire protection
 - f. Noise analysis
 - g. A geological report
 - h. Ice throw calculations
 - i. Blade throw calculations
 - j. Catastrophic tower failure
 - k. A complaint resolution process

C. STANDARDS FOR INDUSTRIAL WECS

1. Construction and Traffic Routes:

- a. Construction of an Industrial WECS poses potential risks because of the large size of construction vehicles and their impact on traffic safety and their physical impact on local roads. Construction and delivery vehicles for WECS and/or associated facilities shall use traffic routes established as part of the application review process. Factors in establishing such routes shall include:
 - 1) Minimize traffic impacts from construction and delivery vehicles.
 - 2) Minimize WECS related traffic during times of school bus activity.
- b. Permit conditions may require remediation during construction, limit WECS-related traffic to specified routes, and include a plan for disseminating traffic route information to the public and all applicable state, county and municipal highway authorities and superintendents whose roads are included in the WECS traffic route plan. Notification to all applicable highway authorities and superintendents will include the number and type of vehicles and their size, their maximum gross weight, the number of round trips, and the dates and time periods of expected use of designated traffic routes.
- c. The WECS Owner is responsible for remediation of damaged roads during construction and upon completion of the installation, periods of maintenance, and decommissioning/restoration of a Wind Energy Facility.
- d. Storm-water run-off and erosion control shall be managed in a manner consistent with all applicable State and Federal laws and regulations.
- e. Geological soil testing shall be done at each proposed tower foundation. Should testing suggest any interference with existing water aquifers the site will be disqualified.
- f. Access roads required for construction shall be adequate to support weight of trucks, erection cranes, facility sections and heavy construction equipment. Temporary roads are to be returned to pre-construction condition leaving only private driveways used for routine maintenance by facility and utility crews. Overnight parking of vehicles will be permitted only during established construction period or during periods requiring additional personnel or equipment for maintenance and repair of a WECS. Parking is prohibited on public roads at all times.
- g. Excess materials shall not be used to raise existing grade at the tower base. Excess materials may not be removed from the Town of Sweden without permission from the Code Enforcement Officer.
- h. All underground work shall be clearly marked "As Built", documented during construction, plotted upon completed project drawings, and filed with the Town of Sweden with "Dig Safely New York (1-800-962-7962)" or its successor.
- i. Redesign of utility poles must consider impact of access for large farming machinery.
- j. The Town of Sweden will employ an independent engineering inspection service to monitor all construction/erection activities. The facility developer shall assume all costs of this service.

- k. All solid waste, hazardous waste and construction debris shall be removed from the Site and managed in a manner consistent with all appropriate rules and regulations as set forth by the appropriate agencies.
- l. Any construction, ground disturbance or restoration involving agricultural land or land located in agricultural districts shall be done according to the New York State Department of Agriculture and Markets' publication titled, "Guidelines for Agricultural Mitigation for Wind Power Projects."

2. Certification

The Wind Energy Facility Developer shall employ an independent and Town of Sweden approved, engineering service to certify to the Town that the facility is built as designed and is qualified for service before final permit is issued by the Planning Board. The applicant shall provide the following certifications:

- a. All structural components, including the foundation, tower and compatibility of the tower with the rotor and rotor-related equipment shall be certified in writing by an independent licensed Professional Engineer. The engineer shall certify compliance with all applicable local, state, and federal codes and regulations.
- b. After completion of the WECS, the applicant shall provide a post-construction certification from an independent licensed Professional Engineer stating that the project complies with applicable codes and industry practices and has been completed according to the design plans.
- c. The electrical system shall be certified annually in writing by an independent licensed Professional Engineer. The engineer shall certify compliance with good engineering practices and with the appropriate provisions of IEEE standards and any other explicit technical standards required in New York State.
- d. The rotor over speed control system shall be certified in writing by an independent licensed Professional Engineer. The engineer shall certify compliance with applicable design and operational codes. The certification shall be renewed annually by the applicant.
- e. Certification of project completion must be supplied by the applicant and approved by the Town of Sweden Code Enforcement Officer.

3. Color, Finish and Visual Impact

- a. All Wind Energy Facility Developers shall use measures to reduce the visual impact of WECS to the greatest extent possible. All structures shall be finished in a single, non-reflective matte finish color or a camouflage scheme and shall include a maintenance schedule and plan to maintain the finished color and appearance of the WECS.
- b. Individual WECS within a Wind Energy Overlay District shall be constructed using wind turbines whose design and appearance shall exhibit uniformity to each other in all respects to height, color, size, geometry, and rotational speed.
- c. No lettering, company insignia, advertising, or graphics shall be on any part of the tower, hub, or blades.

- d. No television, radio, or other communication antennas may be affixed or otherwise made part of any WECS.
4. Compliance with Regulatory Agencies
- The applicant is required to obtain all necessary regulatory approvals and permits from all federal, state, county, and local agencies having jurisdiction and approval related to the completion of the WECS.
5. Electrical
- a. All interconnecting lines and wires from generators to ground ancillary structures and utility transmission grid will be installed underground to the maximum extent practicable. The Planning Board shall have the authority to waive this requirement only if the Planning Board has sufficient engineering data submitted by the applicant to demonstrate that underground transmission lines are unfeasible.
 - b. Underground high voltage lines shall have cover to existing grade, per National Electrical Code (NEC) burial guidelines.
 - c. All precautions shall be applied to prevent stray voltage leakage; should such occur, immediate remedial correction must be taken. A report of complaint and remediation must be given to the Town of Sweden Code Enforcement Officer for immediate analysis and remedial action.
6. Electromagnetic Interference
- a. No Industrial WECS shall be installed in any location where its proximity with existing fixed broadcast, retransmission, or reception antenna for radio, television, or wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception.
 - b. No Industrial WECS shall be installed in any location along the major axis of an existing microwave communication link where its operation is likely to produce electromagnetic interference in the link's operation.
 - c. If it is determined that an Industrial WECS is causing electromagnetic interference, the operator shall take necessary corrective action to eliminate this interference, including relocation or removal of the facilities, or resolution of the issue with the impacted parties.
 - d. Failure to remedy electromagnetic interference is grounds for revocation of the Special Use Permit for any specific WECS causing the interference.
7. Fire Prevention
- a. Shall have automatic fire suppression system within the nacelle.
 - b. All WECS shall be designed and constructed in compliance with the applicable requirements of the New York State Uniform Fire Prevention Code, as currently in effect and as hereafter amended.
8. Height restrictions
- a. The total height of any Industrial WECS shall be no more than two hundred (200) feet. The total height shall be measured from the ground elevation

- from the preconstruction or post construction grade, whichever is lower to the top of the tip of the blade at the apex of rotation.
- b. The blade tip of any wind turbine shall, at its lowest point, have a ground clearance of not less than fifty (50) feet.

9. Landscaping

Upon completion of the installation, the site shall be returned as close as possible to its natural state, including, but not limited to, restoring the subsoil and topsoil to preconstruction condition and reforestation of any woodland that have been cleared for site preparation. Vegetation shall be planted in a natural pattern on the site to screen as much of the facility as possible without restricting air flow. Existing vegetation may be used to supplement new plantings.

10. Lighting

Towers and turbines shall not be artificially lighted or marked beyond the requirements of the Federal Aviation Administration (FAA). Minimum security or safety lighting may be allowed as approved on the Site Plan. Any lighting systems shall be designed to minimize light pollution and shall include the use of light hoods, low glare fixtures or directing lights at the ground. Lighting shall not shine onto adjacent properties.

11. Maintenance and Replacement

- a. A permitted facility may be maintained and repaired at any time, which becomes necessary in the normal course of operation of the Wind Energy Facility, without a Special Permit or Building Permit, provided the maintenance does not involve the following:
 - 1) An increase in the number of towers.
 - 2) An increase in the number of wind turbines.
 - 3) An increase in the tower height.
 - 4) A change in the tower location.
 - 5) A change in the type of wind turbine, nacelle or tower used.
 - 6) A change in the number or size of accessory structures.
 - 7) A change that increases the sound pressure level or shadow flicker produced by the facility.
 - 8) The transportation of heavy equipment, cranes and large spare parts that are oversize loads and require public road use, the widening of access roads, or pose potential damage to the infrastructure of the Town of Sweden, or surrounding communities.
- b. Replacement in kind of a Wind Energy Facility may occur with Planning Board approval when:
 - 1) There will be no increase in total height.
 - 2) No change in location of the WECS.
 - 3) No additional lighting change or facility color.
 - 4) No increase in noise or shadow flicker produced by the WECS.
- c. Overnight parking of vehicles will be permitted only during periods requiring additional personnel, equipment, or extended periods of time necessary for

the maintenance and repair of a wind energy system. There will be no parking on public roads.

- d. Any damaged or unused parts shall be removed from the site within thirty (30) days or stored in a locked on-site storage building. All maintenance equipment, spare parts, oil or chemicals shall be stored in said on-site locked storage building.

12. Safety and Security Requirements

- a. Industrial WECS shall have lightning arresting systems.
- b. Wind turbines shall be equipped with electromagnetic (automatic) and mechanical (manual) braking systems to prevent over rotation, reducing stress on tower and rotor blades. No wind turbine shall be permitted that lacks an automatic breaking, governing, or feathering system to prevent uncontrolled rotation, over speeding, and excessive pressure on the tower structure, rotor blades, and turbine components.
- c. Security signs for public safety and warnings shall be required. At least one sign shall be posted at the base of the tower warning of electrical shock or high voltage. A sign shall be posted on the entry area of fence around each tower or group of towers and any building (or on the tower or building if there is no fence), containing emergency contact information, including a local telephone number with 24 hour, 7 day per week coverage. The Planning Board may require additional signs as approved on the Site Plan.
- d. A security plan shall be required and on file at the Town Hall. The training of first responders and any associated cost shall be the responsibility of the Wind Energy Facility owner/operator. Emergency personnel contact, including appropriate Emergency responders shall be posted at the site.
- e. Vehicle access points shall be guarded by physical structure, fencing or bollards to block non-permitted access to driveways.

13. Noise Standards

- a. The daytime statistical sound pressure level generated by an Industrial WECS shall not exceed 10dBA over the pre-existing daytime average ambient as measured at the off-site property line or 50dBA, whichever is less. Daytime hours are defined as 6:00 AM EST to 11:00 PM EST. The nighttime statistical sound pressure level generated by an Industrial WECS shall not exceed 10dBA over the pre-existing nighttime average ambient as measured at the off-site property line or 35dBA, whichever is less. Nighttime hours are defined as 11:00 PM EST to 6:00 AM EST.
- b. An Industrial WECS shall not operate so at an impulsive sound below 20 Hz at the off-site boundary line.

14. Industrial WECS Setback

- a. Each Industrial WECS shall be set back from Site boundaries as measured from the center of the Industrial WECS to property line:
 - 1) Two (200%) times the tower height as measured from the apex of the rotor blade to the base of the tower or a 10 diameter rotor radius, whichever is greater.

- b. The Planning Board may impose a setback that exceeds the other setbacks set out in this section if it deems that such greater setbacks are necessary to protect the public health, safety and welfare of the community.

D. STANDARDS FOR METS.

1. A maximum height of 200 ft. Should a taller MET Tower be desired, an application to the Zoning Board of Appeals for an area variance will be required.
2. The distance between a wind measurement tower and the property line shall be at least 2 times the total height of the tower. Sites can include more than one parcel and the requirement shall apply to the combined properties. Exceptions for neighboring property are also allowed with the consent of those property owners.
3. Special Use Permits for wind measurement towers may be issued for a period of up to 24 months. Permits may be renewed if the facility is in compliance with the conditions of the Special Use Permit.
4. Anchor points for any guy wires for a wind measurement tower shall be located within the property that the system is located on and not on or across above ground electric transmission or distribution lines. The point of attachment for the guy wires shall be sheathed in bright orange or yellow covering for three feet to eight feet above the ground.

XXX-10 Penalties; Abatement; Limitations; Bonds; Funds and Remedies for Violations for Industrial WECS

A. PENALTIES

Any person owning, controlling, or managing any building, structure, or land who shall construct, operate or maintain a wind energy conversion facility in violation of this Chapter or in noncompliance with the terms and conditions of any permit issued pursuant to this Chapter, or any order of the code enforcement officer, and any person who shall assist in so doing, shall be guilty of an offense and subject to:

1. For a first offense, a fine of not more than \$1,000.00.
2. For a second offense (both within a period of five (5) years), a fine of not less than \$1,000.00 or more than \$2,500.00.
3. For a third offense (all within a period of five years), a fine of not less than \$2,500.00 per day or more than \$5,000.00 per day.
4. If multiple units in one facility have the same or similar violations, each shall be considered as a separate and distinct violation.
5. In case of any violation or threatened violation of any of the provisions of this Chapter, including the terms and conditions imposed by any permit issued pursuant to this section, in addition to other remedies and penalties herein provided, the Town of Sweden may institute any appropriate action or

proceeding to prevent such unlawful erection, structural alteration, reconstruction, moving, and or use, and to restrain, correct, or abate such violation, to prevent the illegal act.

B. REMOVAL

1. Public Nuisance

Every unsafe, incomplete, abandoned, or inoperable Industrial Wind Energy Facility is hereby declared a public nuisance which shall be subjected to abatement by repair, rehabilitation, demolition, or removal.

2. If any Industrial WECS and/ or METS remain non-functional or inoperative for a continuous period of six months, the applicant agrees that, without any further action by the Town Board, it shall remove said system and return the land to pre-existing conditions at its own expense. Removal of the system shall include but not limited to:
 - a. All above ground structures including support buildings, transmission equipment, and fencing from the property.
 - b. Removal of the concrete base of a wind turbine to a depth of not less than five (5) feet below grade elevation.
 - c. All agricultural areas shall be restored to as close to pre-construction conditions as possible and shall be in compliance with NYS Dept. of Agriculture and Markets guidelines. A remediation plan shall be put in place to identify and correct any remaining or recurring impacts derived from a WECS.
3. This provision may be waived at the discretion of the Town Board if the applicant demonstrates to the Town that it has been making good faith efforts to restore the WECS and/or METS to an operable condition, but nothing in this provision shall limit the Town's ability to order a remedial action plan after a public hearing.
4. Notwithstanding any other abatement provisions, if the WECS and/or METS are not repaired, made operational, or brought into compliance after said notice, and after a public meeting at which time the operator or owner shall be given opportunity to be heard and present evidence, including a plan to come into compliance, the Town may:
 - a. Order either remedial action within a particular timeframe.
 - b. Or order revocation of the Special Use Permit for the WECS and order removal of the WECS within Ninety (90) days. If the WECS is not removed, the Town Board shall have the right to use the security posted as part of the decommissioning plan to remove the WECS.

C. TESTING FUND

A Special Use Permit shall contain a requirement that the applicant fund periodic noise and/or shadow flicker testing by a qualified independent third-party measurement consultant, which may be required as often as every two years, or more frequently upon request of the Town in response to complaints by neighbors.

The scope of the testing shall be to demonstrate compliance with the terms and conditions of the Special Use Permit or site plan and shall also include an evaluation of any complaints received by the Town. The applicant shall have ninety (90) days after written notice from the Town Board, to cure any deficiency. An extension of the 90 day period may be considered by the Town Board, but the total period may not exceed one hundred eighty (180) days.

D. SEVERABILITY

If any part or provision of this Chapter or the application thereof to any person or circumstance be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part, provision or application directly involved in the controversy in which such judgment shall have been rendered and shall not affect or impair the validity of the remainder of this article or the application thereof to other persons or circumstances and the town board hereby declares that it would have enacted this Chapter or the remainder thereof had the invalidity of such provision or application thereof been apparent.

E. TRANSFER OF OWNERSHIP

No transfer of any Wind Energy Facility or Special Use Permit, nor sale of the entity owning such facility including the sale of more than 30% of the stock of such entity (not counting sales of shares on a public exchange), will occur without prior approval of the Town Board, which approval shall be granted upon written acceptance of the transferee of the obligations of the transferor under this section, and the transferee's demonstration, in the sole discretion of the Town Board, that it can meet the technical and financial obligations of the transferor. No transfer shall eliminate the liability of the transferor, nor of any other party, under this Section unless the entire interest of the transferor in all facilities in the Town is transferred and there are no outstanding obligations or violations.

