

LOCAL LAW # _____ OF 2021 AMENDING
CHAPTER 173 TO THE SWEDEN TOWN CODE
CONCERNING WIND ENERGY CONVERSION SYSTEMS

Be it enacted by the Sweden Town Board, County of Monroe, State of New York
(hereinafter referred to as the Town Board), as follows:

SECTION 1. TITLE (§173-1)

This Local Law shall be referred to as “Local Law # _____ of 2021 Amending Chapter 173 to the Sweden Town Code Concerning Wind Energy Conversion Systems”.

SECTION 2. AUTHORIZATION (§173-2)

This Local Law is adopted pursuant to the New York State Constitution, Article IX, Town Law §261-§264 and Municipal Home Rule Law §10.

SECTION 3. PURPOSE AND INTENT (§173-3)

The Town of Sweden (hereinafter referred to as 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 amend Sweden Town Code §173 in order to regulate the use of wind turbines within 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 citizens and property in Sweden.

SECTION 4. APPLICABILITY (§173-4)

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

SECTION 5. FINDINGS (§173-5)

A. Wind energy is an abundant, renewable, and nonpolluting energy resource in 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 Sweden Zoning Code and the 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 Sweden.

E. Wind Energy Conversion Systems may present risks to the property values of adjoining property owners.

SECTION 6. DEFINITIONS (§173-6)

A. The following rules of construction of language shall apply to this law:

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 herein shall be interpreted so as to give them the meaning they have in common usage and to give this law it's most reasonable application. In cases where words or phrases are not defined herein but are defined elsewhere in the Sweden Town Code, the words or phrases shall have the meaning set forth elsewhere in the Sweden Town Code. In the event of a conflict, the definitions in this law shall control. When used herein the following terms shall have the respective meanings set forth as follows.

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

B. APPLICANT, DEVELOPER, OPERATOR or OWNER: The use of these terms herein are interchangeable and should be interpreted to give the most reasonable and logical application to the provision(s) containing one or more of these terms.

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

D. 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 also Sound Pressure Measurement.)

E. 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.

F. 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, 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.

G. 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.

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

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

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

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

L. LICENSED: Unless otherwise provided herein, any reference to a licensed

engineer, licensed surveyor, licensed architect or licensed landscape architect shall mean any individual person currently licensed for same in the State of New York.

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

N. 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.

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

P. OFF GRID: A Wind System not connected to power grid.

Q. ON GRID: A Wind System connected to a power grid.

R. 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).

S. 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.

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

U. STANDARD INTERCONNECTION AGREEMENT: Agreement between a local producer and a utility company.

V. 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 a human can 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.

W. TOTAL HEIGHT: (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.

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

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

Z. TRANSFORMER: An electrical device used to change voltages.

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

BB. VERTICAL AXIS WIND TURBINE: (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.

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

1. 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 more than 36 feet, but, no greater than one hundred (100) feet and with a rated output less than or equal to 10 kilowatts.

2. 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 more than 100 feet, but no greater than two hundred (200) feet and with a rated output less than or equal to 1.5 MW.

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

SECTION 7. RESIDENTIAL WIND ENERGY CONVERSION SYSTEMS (§173-7)

A. GENERAL CONSIDERATIONS

1. The placement, construction, and major modification of all Residential

WECS within the boundaries of Sweden shall be permitted only by special use permit.

2. Residential WECS shall require a site plan review and approval by the Sweden Planning Board (hereinafter referred to as the Planning Board), a Special Permit issued by the Planning Board and a building permit issued by the Sweden Code Enforcement Officer per Sweden Town Code §175.

3. The special use permit shall be valid initially for five (5) years. Renewal shall be required every five (5) years.

4. The applicant must pay all costs associated with 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 feet 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 a 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 PROCESS

1. Upon submittal of an application, the Planning Board will, within thirty (30) days of receipt (or such longer time if agreed to by the applicant) determine the completeness

of 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 must include the following:

a) 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, mailing address and telephone number of the applicant. If the applicant is represented by an agent, the application shall include the name, mailing address and telephone number of the agent as well as an original signature of the applicant authorizing the representation.

c) Name, mailing address and telephone number of the property owner. If the property owner is not the applicant, the application shall include a signed written document 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.

d) 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.

e) 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.

f) Site location map, including north arrow and bar scale.

g) Boundaries and physical dimensions of the site in sufficient scale to verify setbacks.

h) Existing watercourses and bodies of water, including any state and federal wetlands.

i) Public and private roads within one hundred (100) feet of the site boundaries.

j) Existing residential and non-residential structures and driveways located on-site.

k) Existing residential and non-residential structures located off-site and within five hundred (500) feet of the site boundaries.

l) Location of the proposed tower, equipment, foundations, guy points, substations, accessory structures, fences and any other amenities.

m) Existing and proposed above ground and underground utilities located on the site.

n) Construction plan detailing access routes, on-site disturbance of landscape, trees, soils and restoration thereof at completion of facility erection period.

o) A circle drawn to scale around the tower which includes the fall zone equal to 200% of rotor blade height at apex.

p) The applicant may be required to include scaled engineering drawings certified by a licensed Professional Engineer which show details and dimensions of the tower, turbine, foundation, the distance between the ground and the lowest point of any rotor blade, the height and location of climbing pegs and ladders, fencing and all details of all proposed equipment, accessory structures, access roads and driveways.

q) A full SEQRA Environmental Assessment Form (EAF) with Part 1

prepared by the applicant and also an EAF Addendum (from SEQRA Part 617.20, Appendix B).

r) If required by Town Law §283-A or Agricultural and Markets Law §305-a, the applicant shall submit an Agricultural Data Statement.

s) All paperwork is subject to the review and approval of the Town Attorney or the Attorney advising the Planning Board and approved by resolution of either the Town Board and/or Planning Board as required.

t) A written agreement by the applicant agreeing 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 special permit process to ensure compliance or to resolve noise or visual complaints received from nearby property owners.

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 fall zone shall not include public/private roads or be located on or

across any above ground electrical transmission or distribution lines.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. If it is determined that a Residential WECS is causing electromagnetic interference, the operator shall take action to correct this interference including relocation or removal of the facilities or resolution of the issue with the impacted parties.

13. 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 contact information, identification and logo can be displayed on the system generator housing in an unobtrusive manner.

14. 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.

15. 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.

SECTION 8. PENALTIES FOR OFFENSES AND
ABATEMENT FOR RESIDENTIAL WIND ENERGY
CONVERSION SYSTEMS (§173-8)

A. PENALTIES

1. Any person owning, controlling, or managing any building, structure, or land who shall construct, operate or maintain a WECS Facility in violation of this law, in noncompliance with the terms and conditions of any permit issued pursuant to this law,

and/or in violation of any order of the Sweden Code Enforcement Officer shall be guilty of an offense and subjected to:

- a) for a first offense, a fine of not more than \$100.
- b) for a second offense (both within a period of five (5) years), a fine of not less than \$100 or more than \$250.
- c) for a third offense (all within a period of five years), a fine of not less than \$250 per day or more than \$1,000 per day.

2. If multiple units in one facility have the same or similar violations, each shall be considered as a separate and distinct violation.

3. In case of any violation or threatened violation of any of the provisions of this law, Sweden reserves the right to seek judicial intervention to prevent same.

B. REMOVAL

1. Any unsafe, incomplete, abandoned, or inoperable WECS shall be deemed a public nuisance subject to abatement by repair, rehabilitation, demolition, or removal.

2. If any WECS remains non-functional or inoperative for a continuous period of six (6) months, the applicant agrees that, without any further action by the Town Board or Planning 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 a WECS is not remediated, repaired, made operational, or brought into permit compliance in a timely fashion, the Town Board and/or Planning Board can order remedial action within a particular timeframe, order revocation of the special use permit and/or order removal of the WECS.

SECTION 9. INDUSTRIAL WIND ENERGY CONVERSION SYSTEMS AND WIND SITE ASSESSMENT EQUIPMENT (§173-9)

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 can be installed upon the Planning Board issuing a special use permit. The standards for the special use permit shall be pursuant to Sweden Town Code §175.

SECTION 10. INCENTIVE ZONING FOR INDUSTRIAL WIND ENERGY SYSTEMS (§173-10)

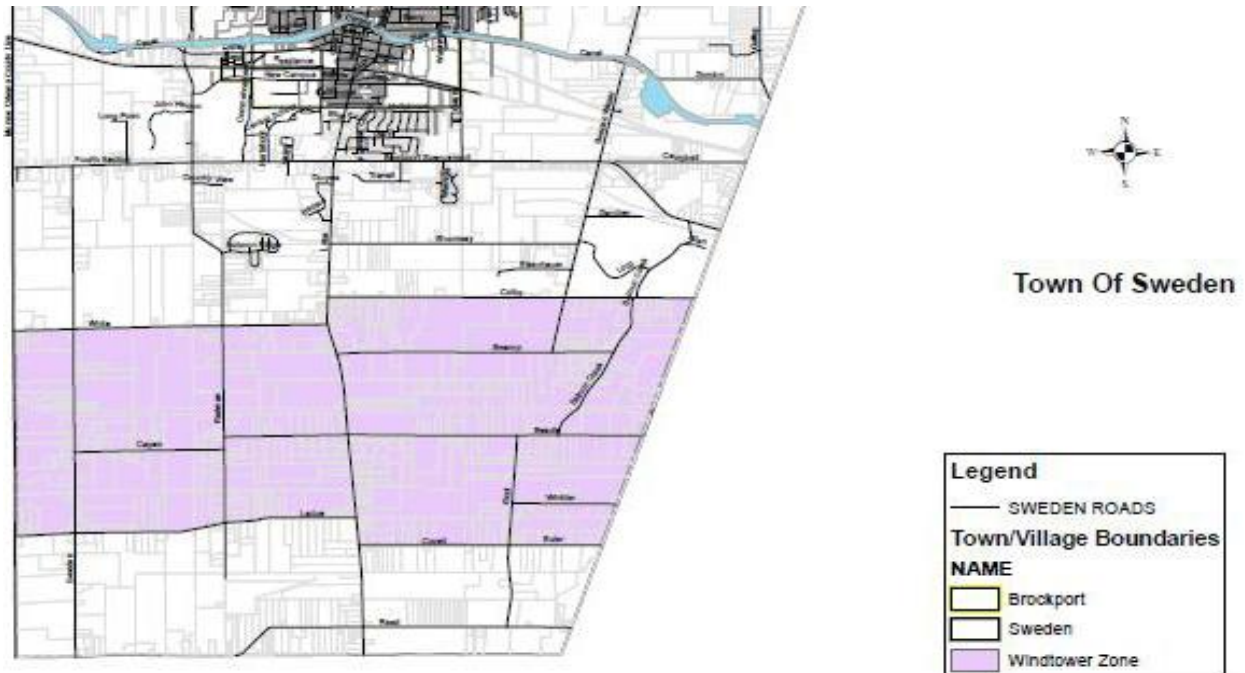
A. Industrial WECS and/or METS up to 200 feet are allowed in the Sweden through Incentive Zoning.

B. Incentive Zoning.

1. Application for Industrial WECS and/or METS must be made to and approved by the Sweden Town Board through Incentive Zoning as specified in Sweden Town Code §175.

2. Upon the Town Board's approval for the WECS Incentive Zoning, application is to be made to the Planning Board for approval where it must meet the guidelines set forth herein. Concurrent application can be made to the Town Board and the Planning Board if time is an issue. No application will be approved by the Planning Board until

Incentive Zoning is approved by the Town Board.



SECTION 11. INDUSTRIAL WIND ENERGY CONVERSION SYSTEMS AND METEOROLOGICAL TOWERS (§173-11)

A. GENERAL CONSIDERATIONS

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. 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.

3. 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.

4. Multiple towers may be sited on a contiguous property and on legally leased adjacent parcels.

5. The applicant shall pay all costs associated with 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. 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.

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 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 longer time if agreed to by the applicant) determine if all information required in the application. No application shall be acted on by the Planning Board until the application is deemed complete by the Planning Board. No approvals will be granted by the Planning Board until after Incentive Zoning approval by the Town Board.

4. An Application for an Industrial WECS and/or METS shall include the following:

- a. Name, mailing address, and telephone number of the applicant. If the applicant is represented by an agent, the application shall include the name, mailing 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, mailing address, and telephone number of the property owner. If the property owner is not the applicant, the application shall include a signed written document 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 hundred (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 must be obtained for the purpose of determining damage, same to be supplied to the Planning Board and the 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) 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) 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) 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 farmland removed from use during the construction period and after completion of the Industrial WECS and/or METS facility.

5. SEQRA Review:

a) Applications for Industrial WECS and/or METS are deemed Type 1 projects under SEQRA. The town may conduct SEQRA Review in conjunction with other agencies in which case the records of review by said agencies shall be part of the record. SEQRA shall also include a Visual EAF Addendum (from SEQRA Part 617.20, Appendix B).

b) 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.

c) If required by Section 283-a of New York Town Law §283-a or Agricultural and Markets Law §305-a, the applicant shall submit an Agricultural Data Statement.

6. Wind Energy studies: The reviewing board may require some or all of the following studies, same to 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 minimizing traffic impacts from construction and delivery vehicles and minimizing 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 be subject to all applicable state, county and municipal highway authorities whose roads are included in the WECS traffic route plan. Notification to all such authorities will include the number and type of vehicles, 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 periods 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 Sweden without permission from the Sweden 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) 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.

1) 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.

In relationship to certification, any WECS developer shall employ an engineering service approved by Sweden to certify that the facility is built as designed and is qualified for service before a 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 Sweden Code Enforcement Officer.

3. Color, Finish and Visual Impact:

a) All WECS 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. 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 and, should such occur, immediate remedial correction must be taken. A report of complaint and remediation must be given to the 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.

7. Fire Prevention.

a) Industrial WECS shall have automatic fire suppression system within the nacelle.

b) All Industrial 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 or 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. 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 shall be maintained at all times by the owner/operator 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 an Industrial WECS may occur with Planning Board approval when:

1. There will be no increase in total height.
2. No change in location.
3. No additional lighting change or facility color.
4. No increase in noise or shadow flicker produced.

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 must 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 are 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 filed with the Sweden Building Department. The training of first responders and any associated cost shall be the responsibility of the Industrial WECS 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 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, two times (200% of) 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 can impose a setback that exceeds the other setbacks set out in this section if it deems such greater setbacks to be necessary in order to protect the public health, safety and welfare.

D. STANDARDS FOR METS.

1. METS shall be a maximum height of 200 feet. Should a taller MET Tower be desired, an application to the Sweden Zoning Board 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.

SECTION 12. PENALTIES FOR OFFENSES AND ABATEMENT
FOR INDUSTRIAL (§173-12)

A. PENALTIES.

1. Any person owning, controlling, or managing any building, structure, or land who shall construct, operate or maintain a WECS in violation of this law, in noncompliance with the terms and conditions of any permit issued pursuant to this law, any order of the Sweden Code Enforcement Officer and/or in violation of, shall be guilty of an offense and subject to:

a) for a first offense, a fine of not more than \$1,000.

b) for a second offense (both within a period of five (5) years), a fine of not less than \$1,000 or more than \$2,500.

c) for a third offense (all within a period of five (5) years), a fine of not less than \$2,500 per day or more than \$5,000 per day.

2. If multiple units in one facility have the same or similar violations, each shall be considered as a separate and distinct violation.

3. In case of any violation or threatened violation of any of the provisions of this law, Sweden reserves the right to seek judicial intervention to prevent same.

B. REMOVAL.

1. Every unsafe, incomplete, abandoned, or inoperable Industrial Wind Energy Facility shall be deemed a public nuisance subject 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 or Planning 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 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 remediated, repaired, made operational, or brought into compliance in a timely fashion, the Town Board and/or Planning Board can order remedial action within a particular timeframe, order revocation of the Special Use Permit for the WECS and/or order removal of the WECS.

C. TESTING FUND.

A special use permit must 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 Sweden. 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 Sweden. 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.

SECTION 13. ABANDONMENT AND DECOMMISSIONING (§173-13)

Abandonment and decommissioning considerations shall follow Sweden Town Code §178.

SECTION 14. TRANSFER OF OWNERSHIP (§173-14)

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 law unless the entire interest of the transferor in all facilities in Sweden is transferred and there are no outstanding obligations or violations.

SECTION 15. SEVERABILITY AND VALIDITY (§173-15)

The invalidity or unenforceability of any section, subsection, paragraph, sentence, clause, provision, or phrase of the aforementioned sections, as declared by the valid judgment of any Court of competent jurisdiction to be unconstitutional, shall not affect the validity or enforceability of any other section, subsection, paragraph, sentence, clause, provision, or phrase, which shall remain in full force and effect.

