

**Town of Allegany**  
**Wind Energy Regulations**

**Proposed Amendments to the Town's Zoning Ordinance**

*Revised August 21, 2007*

**ADOPTED AUGUST 28, 2007**

*Amend Article II, Rules and Definitions, Section 2.02 Definition of Terms, to add the following new definitions:*

WIND ENERGY CONVERSION SYSTEM (WECS) – Any mechanism designed for the purpose of converting wind energy into electrical energy. A WECS may include one or more wind turbines, towers, associated control or conversion electronics, transformers, and/or other maintenance or control facilities or other component used in the system. A WECS may be either a Commercial Wind Energy Conversion System or a Non-Commercial Wind Energy Conversion System.

COMMERCIAL WIND ENERGY CONVERSION SYSTEM - A wind energy conversion system that is intended solely to generate electrical power for sale to the power grid.

NON-COMMERCIAL WIND ENERGY SYSTEM - A wind energy conversion system that is incidental and subordinate to another use on the same parcel and that supplies electrical power solely for on-site use, except that when a parcel on which a noncommercial WECS is installed also receives electrical power supplied by a utility company, excess electrical power generated by the noncommercial WECS and not presently needed for on-site use may be used by the utility company in exchange for a reduction in the cost of electrical power supplied by that company to the parcel for on-site use, as long as no net revenue is produced by such excess electrical power.

GRADE, NATURAL – Elevation of the existing surface of the land prior to commencement of construction of any improvements proposed or previous site disturbance.

GRADE, FINISHED – The final elevation of the ground level of a site after development.

***Amend Article II, Rules and Definitions, Section 2.02 Definition of Terms, to revise the following definition:***

HEIGHT – when referring to a tower or other structure, the distance measured from the finished grade of the parcel to the highest point on the tower or other structure, including the base pad and any antenna. The height of a wind energy conversion system shall be measured from natural grade to the top of the tip of the blade in the vertical position.

***Amend Article IV, District Regulation, Section 4.02 Schedule A, as follows:***

- Add Commercial Wind Energy Conversion System as a Special Permitted Use in the A-F District.
- Add Non- Commercial Wind Energy Conversion System as a Special Permitted Use in the A-F District.

***Amend Article V, Supplemental Regulations, by adding a new Section, Section 5.25, Commercial Wind Energy Conversion Systems, as follows:***

### **Section 5.25 Commercial Wind Energy Conversion Systems (WECS)**

#### **(A) Intent and Purpose**

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

The purpose of these regulations for Commercial Wind Energy Conversion Systems (WECS) is to ensure that development of these facilities will have a minimal impact on adjacent properties and to protect the health, safety and welfare of residents of the Town.

#### **(B) Application Process**

- (1) Prior to construction of any commercial WECS, the project proponent shall first obtain Special Use Permit and Site Plan Approval from the Town of Allegany Planning Board and a Building Permit from the Town's Code Enforcement Officer.

(2) Initial Application Materials

In order to ensure Planning Board input into the parameters of the studies that are required in Subsection 5.25(B)(3), there will be a two-stage application process. Initially, in addition to the application requirements of Article VIII and Article IX, all applications for a commercial WECS shall include the following information:

- (a) Name and address of the applicant
- (b) Evidence that the applicant is the owner of the property or has the written permission of the owner to make such an application.
- (c) A site plan drawn in sufficient detail to show the following:
  - i. Location of the tower(s) on the site and the tower height, including blades, rotor diameter and ground clearance.
  - ii. Utility lines, both above and below ground, within a radius equal to the proposed tower height, including the blades.
  - iii. Property lot lines and the location and dimensions of all existing structures and uses on site within 1000 feet of the Wind Energy Conversion Systems.
  - iv. Surrounding land use and all off-site structures within 1000 feet, or 2.25 times the tower height, whichever is greater, of the Wind Energy Conversion Systems.
  - v. Description of the various structural components of the tower construction including the base and footing.
  - vi. Existing topography
  - vii. Proposed plan for grading and removal of natural vegetation
- (d) Full SEQRA Environmental Assessment Form.
- (e) Other information: Such additional information as may be reasonably required by the Town Engineer, Town Planner or Planning Board for an adequate assessment of the proposed project.
- (f) The Planning Board may determine that not all of these application materials is necessary for a particular proposed project. Any requirements determined by the Planning Board not to be deemed necessary must be fully documented with the reasons clearly noted.

(3) Studies and information required prior to decision on the application

After a review of the Environmental Assessment Form and the proposed project, the Planning Board shall provide direction to the applicant on the methodology and parameters of the studies to be provided, below:

- (a) Proposed plan for site restoration after construction, prepared according to NYS Department of Agriculture and Markets and NYS Department of Environmental Conservation guidelines.

- (b) Plan for ingress and egress to the proposed project site including:
  - i. A description of the access route from the nearest State, County, and/or Town-maintained roads
  - ii. Road surface material, stating the type and amount of surface cover.
  - iii. Width and length of access route.
  - iv. Dust control procedures during construction and transportation.
  - v. A road maintenance schedule or program.
- (c) Detailed construction plan including but not limited to construction schedule, hours of operation; designation of heavy haul routes; a list of material equipment, and loads to be transported; identification of temporary facilities intended to be constructed and contact representative in the field with name and phone number.
- (d) Erosion and Sediment Control Plan (A SWPPP will meet this requirement).
- (e) Specific information on the type, size, height, rotor material, rated power output, performance, safety, and noise characteristics of each commercial wind turbine model, tower, and electrical transmission equipment.
- (f) Photographs and/or detailed drawings of each wind turbine model, including the tower and foundation.
- (g) Visual Assessment, including a detailed or photographic simulation showing the site fully developed with all proposed wind turbines and accessory structures. The Planning Board shall determine which viewpoints the visual assessment shall include.
- (h) Noise analysis. A Noise Analysis shall be furnished which shall include the following:
  - i. A description and map of the project's noise-producing features, including the range of noise levels expected, and the tonal and frequency characteristics expected. The noise report shall include low frequency, infrasound, pure tone, and repetitive/impulsive sound.
  - ii. A description and map of the noise sensitive environment, including any sensitive noise receptors, i.e., residences, hospitals, libraries, schools, places of worship and similar facilities within 2500 feet of the turbine(s) and/or other sensitive receptor points that may be identified by the Planning Board.
  - iii. A survey and report prepared by a qualified professional, that analyzes the preexisting ambient sound level (including seasonal variation), including but not limited to separate measurements of low frequency and A-weighted noise levels across a range of wind speeds (including near cut-in), turbulence measurements, distance from the turbines, location of sensitive receptors relative to wind direction; and analyses at affected sensitive noise receptors located within 2500

- feet of the turbine and/or other sensitive receptor points that may be identified by the Planning Board.
- iv. A description and map showing the potential noise impacts, including estimates of expected noise impacts from both construction and operation, and estimates of expected noise levels at sensitive receptor locations;
  - v. A description of the project's proposed noise-control features, including specific measures proposed to protect workers, and specific measures proposed to mitigate noise impacts for sensitive receptors consistent with the requirements of this ordinance.
  - vi. Manufacturers' noise design and field testing data, both audible (dB(A), and low frequency (deep bass vibration), for all proposed structures.
- (i) A geotechnical report shall be furnished which shall at a minimum include the following:
- i. Soils and geologic characteristics of the site based on on-site sampling and testing, to provide an assessment of the soil suitability for construction of the proposed WECS.
  - ii. Foundation design criteria for all proposed structures.
  - iii. Slope stability analysis.
  - iv. Grading criteria for ground preparation, cuts and fills, soil compaction.
- (j) Engineer's report, prepared by a Professional Engineer licensed in New York State, that provides information regarding the following potential risks. The results of the engineer's report shall be used to determine the adequacy of setbacks from the property line to mitigate any effects from potential ice throw, tower failure, or blade throw.
- i. Ice throw calculations: A report that calculates the maximum distance that ice from the turbine blades could be thrown, and the potential risk assessment for inhabitants and structures. (The basis of the calculation and all assumptions must be disclosed.)
  - ii. Blade throw calculations: A report that calculates the maximum distance that pieces of the turbine blades could be thrown, and the potential risk assessment for inhabitants and structures. (The basis of the calculation and all assumptions must be disclosed.)
  - iii. Catastrophic tower failure: A report from the turbine manufacturer stating the wind speed and conditions that the turbine is designed to withstand, and the potential risk assessment for inhabitants and structures. (including all assumptions).
  - iv. Certification by a registered New York State Professional Engineer that the tower's design is sufficient to withstand wind loading requirements for structures **or** as established by the New York State Building Code.
- (k) Lighting plan: The applicant shall submit a commercial wind energy facility lighting plan that describes all lighting that will be required, including any lighting that may

be required by the FAA. Such plan shall include but is not limited to the planned number and location of lights, light color, whether any such lights will be flashing, and mitigation measures planned to control the light so that it does not spill over onto neighboring properties.

- (l) Shadow Flicker Study: The applicant shall conduct a study on potential shadow flicker. The study shall identify locations where shadow flicker may be caused by the WECSs and the expected durations of the flicker at these locations. The study shall identify areas where shadow flicker may interfere with residences and describe measures that shall be taken to eliminate or mitigate the problem.
- (m) Study of potential impacts to birds and bats, using methodology approved by NYSDEC or another agency acceptable to the Planning Board.
- (n) Decommissioning and Site Restoration Plan
- (o) FAA notification: A copy of written notification to the Federal Aviation Administration.
- (p) Utility notification: Utility interconnection data and a copy of a written notification to the utility of the proposed interconnection.
- (q) Notification to microwave communications link operators: An application that includes any wind turbine which is located within two miles of any microwave communications link shall be accompanied by a copy of a written notification to the operator of the link.
- (r) Other information: Such additional information as may be reasonably required by the Town Engineer, Town Planner or Planning Board for an adequate assessment of the proposed project.
- (s) The Planning Board may determine that not all of these application materials is necessary for a particular proposed project. Any requirements determined by the Planning Board not to be deemed necessary must be fully documented with the reasons clearly noted.

(4) SEQR Review

Pursuant to Section 617.13 of NY State Environmental Quality Review Regulations, and Section 9.08 of the Town's Site Plan Review regulations in the Town's Zoning Ordinance II, the Town may hire consultants to assist the Planning Board in its review of the potential impacts of a proposed project and the assessment of impacts provided by the applicant. The Town will charge the applicant for the cost of such consultant to the extent allowed in Part 617.13 and/or Section 9.08.

**(C) Criteria for Approval**

In addition to the criteria contained in Article VIII and Article IX of this Zoning Ordinance, the Planning Board shall use the following criteria to evaluate all Commercial Wind Energy Conversion Systems:

**(1) Setbacks**

All commercial WECS shall comply with the following setbacks:

- (a) All wind turbines and towers shall be setback from property lines a minimum of 1.5 times the height of the structure, including to the tip of the blade, excluding adjoining lot lines where both lots are part of the proposed project.
- (b) All wind turbines and towers shall be setback a minimum of 2500 feet from the boundaries of any R-1 or R-2 Zoning District.
- (c) All wind turbines and towers shall be set back a minimum of 1000 feet, or 2.25 times the tower height, whichever is greater, from any year-round residence that exists at the time that an application for a WECS is made to the Town. For purposes of this sub-section, a year round residence shall be considered to be in existence if a building permit for such structure has been issued by the Town's Building Inspector, even if construction is not yet completed and the residence is not yet occupied. For purposes of this sub-section, a seasonal residence is not construed to be a year-round residence.
- (d) All wind turbines and towers shall be set back from all structures and buildings, other than year round residences, that are in existence at the time of the application, or for which a building permit has been issued, a minimum of 1.5 times the height of the tower, including to the tip of the blade. The Planning Board may, at its discretion, exempt minor structures, such as walls, fences, tool sheds and similar minor structures from this setback requirement.
- (e) All wind turbines and towers shall be set back from any public road a minimum of 1.5 times the height of the structure, including to the tip of the blade.

**(2) Noise**

A Commercial WECS shall not be approved unless the applicant demonstrates that the proposed project complies with the following noise requirements. In order to enable the Planning Board to make this determination, the applicant shall submit the noise assessment required in Sub-section 5.25(B).

(a) Audible noise standards:

- i. Audible noise due to wind turbine operations shall not exceed 45 dB(A) for more than five (5) minutes out of any one-hour time period or exceed 50 dB(A) for any time period, at the boundary of the proposed project site.
- ii. The sound level from the operation of a Commercial WECS shall not increase by more than 3 dB(A) the nighttime or daytime ambient sound level at any sensitive noise receptors, i.e., residences, hospitals, libraries, schools, places of worship and similar facilities within 2500 feet of the turbine and/or at other sensitive receptor points that may be identified by the Planning Board.

(b) Low frequency noise: A commercial wind energy facility shall not be operated so that impulsive sound below 20 Hz adversely affects the habitability or use of any dwelling unit, hospital, school, library, nursing home, or other sensitive noise receptor.

(c) Noise setbacks: The Planning Board may impose a noise 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) Within one year of commencement of commercial operation, the project proponent shall submit a noise study of operation conditions to ensure that the project is in compliance with the standards of this section. The study shall be based on receptor points identified during the application review process. In addition to the initial study, the Planning Board may require periodic additional noise studies.

**(3) Noise and Setback Easements**

In the event that a Commercial WECS does not meet a setback requirement or exceeds the noise criteria, above, the Planning Board may grant a waiver of the setback and/or noise criteria, except for the setback required by Sub-section 5.25(C)(1)(a), in the following circumstances:

- (a) Written consent from the affected property owners is presented to the Planning Board, stating that they are aware of the WECS and the noise and/or setback limitations contained in this Zoning Ordinance, and that consent is granted to (1) allow noise levels to exceed the maximum limits otherwise allowed and/or (2) setbacks less than required; and
- (b) In order to advise all subsequent owners of the burdened property, the consent, in the form required for an easement, has been recorded in the Cattaraugus County Clerk's



Office describing the benefited and burdened properties. Such easements shall be permanent and shall state that they may not be revoked without the consent of the Planning Board, which consent shall be granted upon either the completion of the decommissioning of the benefited WECS in accordance with this Article or the acquisition of the burdened parcel by the owner of the benefited parcel or the WECS.

**(4) Interference with television, microwave and radio reception**

The applicant must submit information that the proposed construction of the Commercial Wind Energy Conversion System will not cause interference with microwave transmissions, cellular transmissions, residential television interference or radio reception of domestic or foreign signals. The applicant shall include specific measures proposed to prevent interference, a complaint procedure, and specific measures proposed to mitigate interference impacts.

**(5) Interference with aviation navigational systems**

- (a) The applicant shall provide documentation that the proposed WECS will not cause interference with the operation of any aviation facility.
- (b) The applicant shall provide documentation that the proposed WESC complies with all Federal Aviation Administration (FAA) regulations.
- (c) Locking mechanisms to limit radar interference required: All commercial WECS shall include a locking mechanism which prevents the blades from rotating when not producing power, in order to limit airport radar interference. This provision does not apply while the WECS is "free-wheeling" during start-up and shutdown. The Planning Board may modify or eliminate the requirement for a locking mechanism if sufficient evidence is presented that no significant airport radar interference will be caused by the commercial WECS.

**(6) Safety and security requirements**

- (a) Safety shutdown: Each wind turbine shall be equipped with both manual and automatic controls to limit the rotational speed of the blade within the design limits of the rotor. A manual electrical and/or overspeed shutdown disconnect switches shall be provided and clearly labeled on the wind turbine structure. No wind turbine shall be permitted that lacks an automatic braking, governing, or feathering system to prevent uncontrolled rotation, overspeeding and excessive pressure on the tower structure, rotor blades, and turbine components.
- (b) Grounding: All structures which may be charged with lightning shall be grounded according to applicable electrical codes.
- (c) Wiring: All wiring between the wind turbines and the wind energy facility substation shall be placed underground unless the Planning Board determines that this is not

prudent or practicable due to site-specific constraints. The applicant is required to provide a site plan showing the locations of all overhead and underground electric utility lines, including substations for the project.

- (d) Ground clearance: The blade tip of any wind turbine shall, at its lowest point, have ground clearance of not less than 50 feet.
  - (e) Climability. Wind turbine towers shall not be climbable up to 25 feet above ground level.
  - (f) Access doors locked: All access doors to wind turbine towers and electrical equipment shall be lockable and shall remain locked at all times when operator personnel are not present.
  - (g) Signage: Appropriate warning signage shall be placed on wind turbine towers, electrical equipment, and wind energy facility entrances. Signage shall also include two twenty-four-hour emergency contact numbers to the owner of the wind turbine in accordance with Local, State, and Federal Codes.
- (7) **Ice throw:** The Planning Board shall determine the acceptable ice throw range based on the activities in the area, location and calculations of the ice throw.
- (8) **Fire hazard protection:** The applicant shall submit a Fire Control and Prevention Program that is appropriate and adequate for the proposed facility. The proposed program may include, but is not limited to, the following
- a. Fireproof or fire resistant building materials.
  - b. Buffers or fire retardant landscaping.
  - c. Availability of water.
  - d. An automatic fire-extinguishing system for all buildings or equipment enclosures of substantial size containing control panels, switching equipment, or transmission equipment-without regular human occupancy.
  - e. Provision of training and fire fighting equipment for local fire protection personnel and/or other emergency responders.

**(9) Impact on wildlife species and habitat**

Development and operation of a commercial wind energy facility shall not have a significant adverse impact on endangered or threatened fish, wildlife, or plant species or their critical habitats, or other significant habitats identified in the Town of Allegany Comprehensive Plan and/or the studies and plans of other regional agencies, based on criteria established by the Federal or State regulatory agencies, as determined by the Town of Allegany Planning Board during SEQRA review. The impact of a commercial WECS on migratory birds and bats shall be evaluated and mitigated based on SEORA findings.

## **(10) Visual Impact**

- (a) No advertising sign or logo shall be placed or painted on any part of any commercial wind energy conversion system.
- (b) Wind turbines shall be painted a non-obtrusive (e.g., such as white, gray, or beige) color that is non-reflective. In order to reduce any daytime lighting requirements by the FAA, the Planning Board may require consultation with the FAA to determine an appropriate color for the structures.
- (c) Where more than one wind turbine is proposed, the project shall use wind turbines whose appearance is similar throughout the project, to provide reasonable uniformity in terms of overall size, geometry and rotational speed.
- (d) Unless required by the FAA or by the Town of Allegany Planning Board, no lighting shall be installed on the WECS turbine or tower, except for ground level security lighting.

## **(11) Shadow Flicker**

The WECS shall be designed such that the project shall minimize shadow flicker onto adjacent existing residences. Mitigation measures, which may include landscaping, shall be incorporated into any Special Use Permit approval. The required shadow flicker study shall identify areas where shadow flicker may interfere with residences and describe measures that shall be taken to eliminate or minimize the problem.

## **(D) Decommissioning and Site Restoration Plan and Bond**

- (1) The applicant shall submit a Decommissioning and Site Restoration Plan, including cost estimate, to the Town Planning Board for its review and approval, prior to the approval of any Special Use Permit. The restoration plan shall identify the specific properties it applies to and shall indicate removal of all buildings, structures, wind turbines, access roads and/or driveways and foundations to 3.5 feet below finish grade; road repair costs, if any; and all regrading and revegetation necessary to return the subject property to the condition existing prior to establishment of the commercial WECS. The restoration shall reflect the site-specific character, including topography, vegetation, drainage, and any unique environmental features. The plan shall include a certified estimate of the total cost (by element) of implementing the removal and site restoration plan. The Decommissioning Plan shall include information regarding the anticipated life of the project.
- (2) As a condition of Special Use Permit approval, the Planning Board shall require the project sponsor to execute and file with the Town Clerk a bond or other form of security acceptable to the Town Board and Town Attorney as to the form, content and manner of execution, in an amount sufficient to ensure the faithful performance of the removal of the tower, wind turbine, and other components of the WECS and the restoration of the site subsequent to such removal, in accordance with the approved Decommissioning and Site Restoration Plan.

- (3) The sufficiency of such bond shall be confirmed at least every five years by an analysis and report of the cost of removal and site restoration, such report to be prepared by a NYS licensed engineer. The project sponsor/operator shall pay the cost of such report. If said analysis and report determines that the amount of the bond in force is insufficient to cover the removal, disposal and site restoration costs, the bond shall be increased to the amount necessary to cover such costs within 10 days of the applicant's receipt of such report. The report and increased amount of the bond shall be filed with the Town Clerk.
- (4) All bond requirements shall be fully funded before a Building Permit is issued.
- (5) The Decommissioning and Site Restoration Bond shall be in effect for the entire duration of the Special Use Permit.
- (6) The applicant and his/her successors or assigns in interest, shall maintain the required bond funds for the duration of the Special Use Permit.

**(E) Road Bond**

- (1) Construction of WECSs poses potential risks because of the large size of construction and transport (delivery) vehicles and their impact on traffic safety and their physical impact on local roads. Construction and delivery vehicles shall use traffic routes established as part of the application review process. Factors in establishing such corridors shall include: (1) minimizing traffic impacts from construction and delivery vehicles; (2) minimizing WECS-related traffic during times of school bus activity; (3) minimizing wear and tear on local roads; and (4) minimizing impacts on local business operations. Permit conditions may limit WECS-related traffic to specified routes and include a plan for disseminating traffic route information to the public.
- (2) The applicant is responsible for remediation of damage to public roads caused by WECS-related traffic, after completion of the installation of the WECS. To ensure that this remediation occurs, prior to the issuance of a Building Permit, the project sponsor shall post a public improvement bond in an amount, as determined by the Town Board and Highway Superintendent, sufficient to repair any damage that occurs to Town roads during the construction phase of the project. The Town Attorney shall approve the form of the bond.
- (3) In the event that any post construction maintenance or replacement of components, which could affect Town roads, is necessary, the project owner/operator shall notify the Town and a new bond for any potential damage to Town roads shall be posted.

**(F) Certification**

The applicant shall provide the following certifications.

- (1) Certification of structural components: The foundation, tower and compatibility of the tower with the rotor and rotor-related equipment shall be certified in writing by a structural engineer registered in New York. The engineer shall certify compliance with good engineering practices and compliance with the appropriate provisions of the Building Code that have been adopted in New York State. This shall be provided prior to the issuance of the Special Use Permit.
- (2) Certification of post construction: After completion of construction of the Wind Energy Conversion System, the applicant shall provide a post-construction certification from a licensed professional engineer registered in the State of New York that the project complies with applicable codes and industry practices and has been completed according to the design plans. This certification shall be provided to the Code Enforcement Officer and shall be maintained in a permanent file.
- (3) Certification of electrical system: The electrical system shall be certified in writing by an electrical engineer registered in New York. The engineer shall certify compliance with good engineering practices and with the appropriate provisions of the Electric Code that have been adopted by New York State. This shall be provided prior to the issuance of the Special Use Permit.
- (4) Certification of rotor overspeed control: The rotor overspeed control system shall be certified in writing by a mechanical engineer registered in New York State. The engineer shall certify compliance with good engineering practices. This shall be provided prior to the issuance of the Special Use Permit.

#### **(G) Liability Insurance**

- (1) Prior to the issuance of a Building Permit, the project sponsor shall provide proof, in the form of a duplicate insurance policy or a certificate issued by an insurance company, that liability insurance has been obtained to cover damage or injury which might result from the failure of the tower, turbine or other component of the WECS.
- (2) Liability insurance shall be carried for the life of the project, through decommissioning. Proof of liability insurance shall be filed annually with the Town Clerk.

#### **(H) Transfer of Ownership**

- (1) If the ownership of the WECS facility changes, the new owner shall present proof to the Town Clerk that all the required bonds and insurance policies remain in full force and effect. The new owner shall provide a written statement that he/she is aware of the conditions and requirements of the Special Use Permit, which continue to govern the operation of the facility.
- (2) In order to ensure compliance with this provision, the person/company to whom the special use permit is originally issued, and subsequent owners, shall provide notification to the Town Clerk 30 days prior to the change of ownership.

## **(I) Inspections**

Unless waived by the Planning Board, wind turbines or towers over 150 feet in height shall be inspected by a New York State Licensed Professional Engineer, who has been approved by the Town, annually or at any other time upon a determination by the Town's Code Enforcement Office that the wind turbine, tower or pole may have sustained structural damage. A copy of the inspection report shall be submitted to the Town Code Enforcement Officer. Any fee or expense associated with this inspection shall be borne entirely by the permit holder.

## **(J) Permit Revocation**

- (1) A WECS shall be maintained in operational condition at all times, subject to reasonable maintenance and repair outages. Operational condition includes meeting all noise requirements, all other standards and requirements of this ordinance, and other permit conditions.
- (2) Should a WECS become inoperative, or should any part of the WECS be damaged or become unsafe or should a WECS violate a permit condition, or violate a standard or requirement of this ordinance, the owner/operator shall remedy the situation within 90 days after written notice from the CEO. The Town Board may extend this period.
- (3) Upon notice from the CEO that the WECS is not repaired or made operational or brought into permit compliance after said notice pursuant to Section J(2) above, the Planning Board shall hold a public hearing at which both the public and the operator/owner are given the opportunity to be heard and present evidence, including a plan to come into compliance. Following the close of the public hearing, the Planning Board may either:
  - (a) order compliance within a stated timeframe; or
  - (b) Revoke the Special Use Permit and order removal of the WECS within 90 days and site remediation pursuant to the approved Decommissioning and Site Restoration Plan.

**(K) Decommissioning of WECS**

**(1) Non-functional and/or inoperative WECS defined**

- (a) If any Commercial WECS remains non-functional or inoperative for a continuous period of one (1) year, the permittee shall remove the WECS at his/her own expense and restore the site, in accordance with the approved Decommissioning and Site Restoration Plan. A commercial WECS shall be deemed non-functional and/or inoperative if it has not generated power within the preceding twelve months.
- (b) As a condition of approval of any Special Use Permit, the Planning Board may request that the applicant periodically submit documentation reporting the power output generated by the WECS.

**(2) Use of Decommissioning Bond**

- (a) Any non-functional or inoperative WECS, or any WECS for which the Special Use Permit has been revoked, shall be removed from the site and the site restored in accordance with the approved Decommissioning and Site Restoration Plan within 90 days of the date on which the facility becomes non-functional or inoperative, as defined above, or of the revocation of the Special Use Permit.
- (b) If removal of the WECS is required and the applicant, permittee or successors fails to remove the WECS and restore the site in accordance with the approved Decommissioning and Site Restoration Plan, the Town Board may contract for such removal and restoration and pay for the removal and restoration from the posted Decommissioning and Site Restoration Bond.
- (c) If the bond is not sufficient, the Town shall charge the permittee for the costs over and above the amount of the bond.

**(L) Planning Board Action**

The Planning Board may grant the Special Use Permit, deny the Special Use Permit, or grant the Special Use Permit with written stated conditions. Denial of the Special Use Permit shall be by written decision based upon substantial evidence submitted to the Board. Upon issuance of the Special Use Permit, the applicant shall obtain a building permit for each tower.

**(M) Amendments to Approval**

Any changes or alterations to the wind energy conversion system, after approval of the Special Use Permit and Site Plan, shall require amendment to the Special Use Permit. Such amendment shall be subject to all the requirements of this section.

**(N) NYS Real Property Tax Law Exemption**

The Town of Allegany hereby exercises its right to opt out of the Tax Exemption provisions of Real Property Tax Law Section 487, pursuant to the authority granted by paragraph 8 of that law, or to exercise its right to require a payment in lieu of taxation pursuant to paragraphs 9(a) and 9(b) of that law.



*Amend Article V, Supplemental Regulations, by adding a new Section, Section 5.26, Non- Commercial Wind Energy Conversion Systems, as follows:*

## **Section 5.26 Non-Commercial Wind Energy Conversion Systems**

### **(A) Intent and Purpose**

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

The purpose of these regulations is to provide standards for Non-Commercial Wind Energy Conversion Systems (WECS) that are designed for on-site home, farm and small commercial use, and that are primarily used to reduce on-site consumption of utility power. The intent of this Article is to encourage the development of non-commercial WECSs and to ensure that development of these facilities will have a minimal impact on adjacent properties and to protect the health, safety and welfare of residents of the Town.

### **(B) Application Process**

- (1) Prior to construction of any non-commercial WECS, the project proponent shall first obtain Special Use Permit and Site Plan Approval from the Town of Allegany Planning Board, and a Building Permit from the Town's Code Enforcement Officer.
- (2) In addition to the application requirements of Article VIII and Article IX, all applications for a non-commercial WECS shall include the following information:
  - (a) Name and address of the applicant
  - (b) Evidence that the applicant is the owner of the property involved or has the written permission of the owner to make such an application.
  - (c) A site plan drawn in sufficient detail to show the following:
    - i. Location of the tower(s) on the site and the tower height, including blades, rotor diameter and ground clearance.
    - ii. Property lot lines and the location and dimensions of all existing structures and uses on site within 300 feet of the Wind Energy Conversion Systems.
    - iii. Dimensional representation of the various structural components of the tower construction including the base and footing.
    - iv. Certification by a licensed New York State Professional Engineer that the towers design is sufficient to withstand wind loading requirements for structures as established by the New York State Uniform Building and Fire Prevention Code.

- (d) Evidence that the proposed tower height does not exceed the height recommended by the manufacture or distributor of the system, provided by a licensed New York State Professional Engineer.
- (e) Turbine information: Specific information on the type, size, height, rotor material, rated power output, performance, safety, and noise characteristics of the residential wind turbine and tower.
- (f) Photographs or detailed drawings of each wind turbine model, including the tower and foundation.
- (g) Grading plan and erosion and sedimentation control plan
- (h) A line drawing of the electrical components of the system in sufficient detail to allow for a determination that the manner of installation conforms to the Electrical Code adopted by New York State.
- (i) Sufficient information demonstrating that the system will be used primarily to reduce on-site consumption of electricity from the grid.
- (j) Written evidence that the electric utility service provider that serves the proposed site has been informed of the applicant's intent to install an interconnected customer-owned electricity generator, unless the applicant does not plan, and so states in the application, to connect the system to the electricity grid.
- (k) Environmental Assessment Form
- (l) Such additional information as may be reasonably requested by the Planning Board for a complete understanding of the proposed project.

### **(C) Criteria for Approval**

In addition to the criteria contained in Article VIII and Article IX of this Zoning Ordinance, the Planning Board shall use the following criteria to evaluate all Non-Commercial Wind Energy Conversion Systems:

#### **(1) Minimum Lot Size**

A non-commercial WECS shall be located on a lot that is a minimum of one acre in size.

- (2) Only one non-commercial WECS shall be allowed per lot. The system shall be primarily used to reduce the on-site consumption of electricity and at no times shall electricity be distributed across property lines.

#### **(3) Setbacks**

The non-commercial WECS shall be set back a minimum of 1.5 times the total height of the WECS from:

- i. Any year-round residence in existence at the time the application is made.
- ii. Property lines of the site on which the structure is located.
- iii. The boundary of any R-1 or R-2 Zoning District
- iv. The right of way of public roads

- (4) Maximum height: The maximum overall height of any non-commercial wind energy conversion system shall be 150 feet.

- (5) The maximum turbine output shall not exceed 100 kW per hour.
- (6) The WECS 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.
- (7) **Lighting:** Exterior lighting on any structure associated with the system shall not be allowed, except lighting that is specifically required by the Federal Aviation Administration (FAA).
- (8) **Signage:** No advertising sign or logo shall be placed or painted on any turbine or tower. The Planning Board may allow the placement of the manufacturer's logo on a ground level structure in an unobtrusive manner.
- (9) **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 related to the construction of the non-commercial Wind Energy Conversion System. If all such approvals have not been received at the time that the Planning Board considers the application for Special Use Permit, receipt of these other agency approvals shall be a condition to be completed prior to the issuance of a Building Permit.
- (10) **Safety and security requirements:** The applicant shall adhere to the following safety and security requirements.
  - (a) **Safety shutdown:** Each wind turbine shall be equipped with both manual and automatic controls to limit the rotational speed of the blade within the design limits of the rotor. The conformance of rotor and over-speed control design and fabrication with good engineering practices shall be certified by the manufacturer.
  - (b) **Grounding:** All structures which may be charged with lightning shall be grounded according to applicable electrical code.
  - (c) **Wiring:** All wiring associated with the wind energy facility shall be installed underground except for "tie-ins" to a public utility company and public utility company transmission poles, towers or lines. This standard may be modified by the Planning Board if the terrain is determined to be unsuitable due to reasons of excessive grading, biological impacts, or similar factors.
  - (d) **Ground clearance:** The blade tip of any wind turbine shall, at its lowest point, have ground clearance of not less than 30 feet.
  - (e) **Climbability:** Wind turbine towers shall not be climbable up to 25 feet above ground level and/or other appropriate method of access control shall be provided.

- (f) **Anchor points for guy wires:** Anchor points for any guy wires for a system tower shall be located on the property that the system is located on and not on or across any above ground electric transmission or distribution lines. The point of attachment for the guy wires shall be enclosed by a fence 6 feet high or sheathed in bright orange or yellow covering from to eight feet above the ground. The minimum set back for the guy wire anchors shall be 10 feet from the property boundary.
- (g) **Signage:** Appropriate warning signage shall be placed on wind turbine towers, and electrical equipment. Signage shall also include one (1) twenty- four-hour emergency contact numbers to the owner of the wind turbine as well as signage warning of electrical shock or high voltage and harm from revolving machinery.

### **(11) Noise Standard**

- (a) **Audible noise standard:** Wind turbine operations shall not cause the noise level at the boundary of the proposed project site to exceed 45 dB(A) for more than five (5) minutes out of any one-hour time period or to exceed 50 dB(A) for any time period. If the ambient noise level in the vicinity of the WECS already exceeds this standard, the operation of the WECS shall not increase the nighttime or daytime ambient sound level at an adjacent residence by more than 3 dB(A).
- (b) **Low frequency noise:** A noncommercial wind energy facility shall not be operated so that impulsive sound below 20 Hz adversely affects the habitability or use of any dwelling unit, hospital, school, library, nursing home, or other sensitive noise receptor.

### **(12) Interference with television, microwave and radio reception**

The noncommercial wind energy conversion energy system shall be operated such that no disruptive electromagnetic interference is caused. If it is demonstrated that a system is causing harmful interference, the system operator shall promptly mitigate the harmful interference or cease operation of the system.

### **(13) Erosion Control**

Prior to granting a special use Permit for a non-commercial WECS, the Planning Board shall determine that the Erosion and Sedimentation Control Plan is adequate.

**(D) Abandonment of Use**

- (1) All non-commercial WECSs shall be maintained in good condition and in accordance with all requirements of this section. The Building Inspector shall inspect each non-commercial WECS annually to insure compliance with this provision. If this inspection shows that the structure is unsafe, then the owner will be given an opportunity to bring the structure into compliance. If the structure is deemed unsafe and the owner does not bring the structure into compliance within a reasonable period of time, the tower shall be dismantled and removed from the property at the owner's expense. The Town reserves the right to dismantle the structure and to charge back the cost of this removal to the property owner. If unpaid this will be added as a charge to the tax levy of the property.
- (2) Failure to abide by and faithfully comply with the standards of this section and with any and all conditions that may be attached to the granting of the Special Use Permit shall constitute grounds for the revocation of the permit, after a public hearing.

**(E) Assessment**

A non-commercial wind energy conversion system shall be subject to assessment by the Town of Allegany.

**(F) Planning Board Action**

The Planning Board may grant the Special Use Permit, deny the Special Use Permit, or grant the Special Use Permit with written stated conditions. Denial of the Special Use Permit shall be by written decision based upon substantial evidence submitted to the Board. Upon issuance of the Special Use Permit, the applicant shall obtain a building permit for each tower.

**(G) Amendments to Approval**

Any changes or alterations to the wind energy conversion system, after approval of the Special Use Permit and Site Plan, shall require amendment to the Special Use Permit. Such amendment shall be subject to all the requirements of this section.