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County City Town Village

(Select one.)

of MACHIAS

Local Law No. 1 of the year 2010

A local law to Regulate Wind Energy Conversion Systems

(Insert Title)

Be it enacted by the Town Board of the
(Name of Legislative Body)

County City Town Village

(Select one.)

of Machias

as follows:

(If additional space is needed, attach pages the same size as this sheet, and number each.)

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Wind Energy Conversion Systems (“WECS”)

Intent and Purpose.

The Town of Machias (“Town”) 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 conversion of wind energy to electricity requires the construction and operation of certain “Wind Energy Conversions Systems” (WECS). WECS is defined as an electric generating facility, whose main purpose is to supply electricity, consisting of one or more wind turbines and other accessory structures and buildings, including substations, meteorological towers, electrical infrastructure, transmission lines and other appurtenant structures and facilities directly associated with measuring, converting and transmitting energy produced by means of transferring kinetic energy from wind to electric energy.

The Town of Machias recognizes the need to ensure that development of these WECS facilities will be done with due regard to the impact the WECS may have on the physical environment and the health, safety and welfare of residents of the Town.

The purpose of these regulations for the construction and operation of Wind Energy Conversion Systems (WECS) is to promote the development of WECS in a manner that maximizes the benefit of such development for all of the residents of the Town while duly protecting the physical environment of the Town and those same resident’s health safety and welfare.

The Town recognizes that WECS are generally categorized into two types: “Utility Scale and “Small Scale”. Due to the size differential the two types have vastly different impacts on residents and the physical environment. As such they require differing levels of study and concern. “Small-Scale WECS” are defined as WECS which are used for the generation of electricity for use mainly for on-site home, farm and small commercial use and that are primarily used to reduce on-site consumption of utility power. In order to encourage the development of Small-Scale WECS by individuals, farmers and small businesses the Town has developed separate regulations for Small-Scale WECS construction and operation. The intent of this section is to encourage the development of Small-Scale WECS while ensuring 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.

No WECS or accessory structures shall be constructed or operated in the Town of Machias unless such WECS complies with the provisions of this local law.

Authority

The Town Board of the Town of Machias enacts this Local Law under the authority granted by:

- i. Article IX of the New York State Constitution, § 2 (c)(6) and (10)
- ii. New York Statute of Local Governments, § 10 (1) and (7).
- iii. New York Municipal Home Rule Law, § 10 (1)(i) and (ii) and § 10(1)(a)(6), (11), (12), and (14).
- iv. New York Town Law §130(1) (Building Code), (3) (Electrical Code), (5) (Fire Prevention), (7) (Use of Streets and Highways), (7-a) (Location of Driveways), (11) (Peace, Good Order and Safety), (15) (Promotion of Public Welfare), (15-a) (Excavated Lands), (16) (Unsafe Buildings), (19) (Trespass), and (25) (Building Lines).
- v. New York Town Law §64(17-a) (Protection of Aesthetic Interests), (23) (General Powers).

Together with all other and further authority provided to the Town under the Constitution and Laws of the State of New York.

Definitions

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

ACCESSORY FACILITIES OR EQUIPMENT: Any structure other than a Wind Turbine, related to the use and purpose of deriving, collecting or distributing energy from such Wind Turbines, located on or associated with a Wind Energy Conversion System, Small Wind Energy Conversion System or Wind Measurement Tower.

PERMIT-A permit issued pursuant to this law granting the holder the right to construct maintain and operate a Wind Energy Conversion System, Small Wind Energy Conversion System or Wind Measurement Tower.

PROPERTY LOT LINE – The perimeter lines of a separate parcel of land as appearing on the tax rolls of the Town of Machias.

PUBLIC ROAD - Any federal, state, county, city, town or village road which is open to the public, or private road regularly used by multiple persons for access to separate off-Site parcels of land, access to which is unrestricted by the owner(s) of said private road.

RESIDENCE -Any dwelling located off-Site which is suitable for habitation on the date a Wind Energy Conversion System, Small Wind Energy Conversion System or Wind Measurement Tower permit application is received by the Town and deemed complete by the Town Board in accordance with section A(2) of this Law, and for which a valid certificate of occupancy has been issued or should have been issued prior to such date. A residence may be part of a multi-family dwelling or multipurpose building, and shall include buildings such as hotels or motels, hospitals, day care centers, dormitories, sanitariums and nursing homes.

SETBACK AGREEMENT – Any agreement, contract, easement, covenant or right in land which burdens land for the benefit of an applicant or permittee, such that the burdened land is similar in character to land on which any Wind Energy Conversion System is situated. A Setback Agreement must expressly release any right which the owner(s) of such burdened land may have in the enforcement of this Law, and acknowledge the applicable requirements of this Law. All Setback Agreements shall run with the land and be recorded to apprise any potential purchasers of such land of the same at least for as long as any Permit issued under this Law shall remain in effect. In the event a Setback Agreement lapses prior to full decommissioning of the Wind Energy Conversion System, Small Wind Energy Conversion System or Wind Measurement Tower, the previously burdened land shall be considered off-Site and the applicant, permittee or owner of the same shall be required to bring the project into conformance with the requirements of this Law.

SITE -The parcel(s) of land where a Wind Energy Conversion System, Small Wind Energy Conversion System or Wind Measurement Tower is to be placed. The Site can be publicly or privately owned by an individual or a group of individuals controlling single or adjacent properties. Where multiple lots are in joint ownership, the combined lots shall be

considered as one for purposes of applying setback requirements. Any property which has a Utility Scale Wind Energy Conversion System, Small Wind Energy Conversion System or Wind Measurement Tower or has entered an agreement for said facility or a Setback Agreement shall not be considered "off-Site."

SMALL SCALE WIND ENERGY CONVERSION SYSTEM -A wind energy conversion system consisting of a Wind Turbine, a tower, and associated control or conversion electronics and electrical collection and distribution equipment, and Accessory Facilities or Equipment, which has a nameplate capacity of not more than 100 kilowatts.

TOTAL HEIGHT -The highest point above ground level of any improvement related to a Utility Scale Wind Energy Conversion System, Small Wind Energy Conversion System or Wind Measurement Tower. Total Height as applied to Wind Turbines shall include the highest point of any wind turbine blade above the tower.

UTILITY SCALE WIND ENERGY CONVERSION SYSTEM -Any Wind Turbine or array of Wind Turbines designed to deliver electricity to the power grid for sale with a combined production capacity of more than 100 kilowatts of energy, including all related infrastructure, electrical collection and distribution lines and substations, access roads and accessory structures, including Accessory Facilities or Equipment,.

WIND MEASUREMENT TOWER -A tower used for the measurement of meteorological data such as temperature, wind speed and wind direction.

WIND TURBINE -A wind energy conversion system consisting of a tower, nacelle and associated control or conversion electronics and equipment contained within or atop the tower together with associated control or conversion electronics and equipment.

I. UTILITY SCALE WIND ENERGY CONVERSION SYSTEM

Any WECS which will have one or more turbines taller than 150 feet as measured from the surface of the ground at the base of the tower to the apex of the blade, and or whose maximum combined output, as shown by the manufacturer's rated capacity, exceeds 10 kW per hour shall be required to comply with the regulations for Utility Scale Wind Energy Conversion Systems

(A) *Utility Scale WECS Application process.*

(1) Wind Energy Permit and Building Permit Required

Prior to construction of any utility-scale WECS, the project proponent ("applicant") shall first obtain a Wind Energy Permit and site plan approval from the Town of Machias Town Board and a building permit from the Town's Code Enforcement Officer.

(2) Initial Application Materials.

In order to ensure appropriate Town Board input into the parameters of the studies that are required in Subsection (A)(3), there will be a two-stage application process. All applications for a utility-scale WECS Wind Energy Permit shall include the following information ("Initial Application Materials"):

- (a) Name and address of the applicant.
- (b) Evidence that the applicant is the owner of any private property upon which the WECS is proposed to be constructed and operated,(the "site") 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 aboveground and belowground, 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 1,500 feet of the wind energy conversion systems.
 - iv. Surrounding land use and all off-site structures within 1,500 feet, or 3.25 x 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) SEQRA Full Environmental Assessment Form.
 - (e) Such additional information as may be reasonably required by the Town for an adequate assessment of the proposed project.
 - (f) The Town Board may, upon application by the applicant, determine that not all of these materials are necessary for a particular proposed project.

(3) Subsequent Application Materials

After a review of the Initial Application Materials and the Environmental Assessment Form for the proposed project, the Town Board shall determine if such proposed project concept may be appropriate based on the Initial Application Materials. Such screening determination shall not constitute an approval of the project nor bind the Town Board to eventually approving the project. If the Town Board determines that such project may be appropriate based on a review of the Initial Application Materials then the Town Board shall provide direction to the applicant on the methodology and parameters of these further studies to be provided:

- (a) Proposed plan for site restoration after construction, prepared according to New York State Department of Agriculture and Markets and New York State 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 Storm Water Pollution Prevention Plan –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 utility-scale 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.
- (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”, defined as: residences, hospitals, libraries, schools, places of worship and similar facilities, within 2,000 feet, or 3.25 x times the tower height, whichever is greater, from any off-site residence.
 - 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.
 - 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.
 - iv. 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.
- vi. Manufacturers' noise design and field testing data, both audible (dBA) and low frequency (deep bass vibration), for all proposed structures.
- (i) A geotechnical report 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 any generally acceptable wind loading requirements for structures including as established by the New York State Building Code.
 - (k) Lighting plan. The applicant shall submit a 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 WECS 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 the NYSDEC or another agency acceptable to the Town Board.
- (n) Decommissioning and site restoration plan.
- (o) FAA notification: a copy of written notification to the Federal Aviation Administration.
- (p) Utility notification: utility and NYISO interconnection data and a copy of a written notification to the utility or NYISO of the proposed interconnection.
- (q) Study of electromagnetic interference with microwave or other communication or broadcast sources. An application that includes any wind turbine which is located within two miles of any microwave communications link shall be accompanied by a study which identifies any potential impact on microwave or other communication or broadcast services and describes measures that shall be taken to eliminate or mitigate any problem.
- (r) Other information. Such additional information, including a property value study, may be reasonably required by the Town Board for an adequate assessment of the proposed project. Such information may include a detailed property value study of the surrounding areas.
- (s) The Town Board may determine that not all of these application materials are necessary for a particular proposed project.
- (t) The Town Board may accept a certification from a professional engineer not licensed in New York upon good cause shown

(4) *SEQR Review.*

Pursuant to the New York State Environmental Quality Review Regulations, the Town may hire consultants to assist the Town Board in its review of the potential impacts of a proposed Utility Scale WECS project and the assessment of impacts provided by the applicant. The Town will require that a sum sufficient to reimburse the Town for these expenses be deposited into an escrow account to be held by the Town Attorney upon an

Escrow Agreement providing that the money will be used for such purpose as negotiated between the Town and the Project Applicant.

(5) Application Fee.

Prior to the Town undertaking a review of the Subsequent Application Materials the Applicant shall deposit with the Town Clerk a sum equal to \$2,000 per proposed name plate megawatts of power the Utility Scale WECS is designed to produce. This sum represents a reasonable estimation by the Town of the additional costs, including personnel cost and out of pocket expenses that could be incurred as a result of processing the application. The cost anticipated includes the cost of engineering and legal consultants to assist the Town in its review of the application as well as the cost of appropriate public information activities including but not limited to providing written and digital materials and conducting public hearings. This fee shall be non-refundable and shall be in addition to and not part of the fee allowed by 6 NYCRR 617 *et seq*

(B) Standards of Operation.

The Town Board shall use the following criteria to evaluate all Utility-Scale Wind Energy Conversion Systems:

(1) Setbacks.

All utility-scale WECS shall comply with the following setbacks:

- (a) All wind turbines and towers shall be set back from property lot lines a minimum of 1,500 ft or 3.25 times the height of the tower, including the tip of blade, whichever is greater, excluding adjoining lot lines where both are part of the proposed project.
- (b) All wind turbines and towers shall be set back from all buildings that are in existence at the time of the application, or for which a building permit has been issued, a minimum of 1,500 feet, or 3.25 x times the height, of the tower, including to the tip of the blade, whichever is greater. The Town Board may, at its discretion, exempt buildings not meant for regular human occupancy such as tool sheds, barns and similar structures from this setback requirement.
- (c) All wind turbines and towers shall be set back from any public road right-of-way a minimum of 750 feet or 1.5 x times the height, of the tower, including to the tip of the blade, whichever is greater.
- (d) The Town board may in individual cases waive or amend any of the setback requirements set forth above upon a factual finding that the setbacks are not required for specific turbines or towers to achieve the goals of this ordinance to protect neighboring property owners from an unreasonable interference with the quiet use and enjoyment of neighboring or nearby properties. Such waiver must include a written finding by the board of the factual basis for providing a waiver or amendment of any setback.

(2) Noise.

A Utility-Scale WECS shall not be approved unless the applicant demonstrates that the proposed project complies with the following noise requirements. In order to enable the Town Board to make this determination, the applicant shall submit the noise assessment required in Subsection (A)(3)(h).

(a) Audible noise standards.

- i. Audible noise due to wind turbine operations shall not exceed 40 dBA for more than five minutes out of any one-hour time period or exceed 45 dBA for any time period, at any property line of any lots which are part of the proposed project site.
- ii. The sound level from the operation of a utility-scale WECS shall not increase by more than three dBA 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 1,500 feet or 3.25 times the height of the proposed turbine, whichever is greater and/or at other sensitive receptor points.

- (a) Low frequency noise: A utility-scale Wind Energy Conversion System shall not be operated so that impulsive sound below 20 Hz affects the habitability or use of any sensitive noise receptor.
- (b) Noise setbacks: The Town 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.
- (c) Within one year of commencement of commercial operation, the project proponent shall submit a noise study of operational 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 this noise study, the Town Board may require periodic additional noise studies.

(3) Noise and setback easements.

In the event that a Utility-Scale WECS does not meet a setback requirement or exceeds the noise criteria above, the Town Board may grant a waiver of the setback and/or noise criteria, except for the setback required by Subsection B(1)(a) in the following circumstances:

- (a) Written consent from the affected property owners is presented to the Town Board, stating that they are aware of the WECS and the noise and/or setback limitations contained in this law and that consent is granted to allow noise

levels to exceed the maximum limits otherwise allowed and/or allow 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, will be recorded in the Cattaraugus County Clerk's Office within 30 days of the issuance of the wind energy permit 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 Town, 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 Utility-Scale 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 WECS complies with all Federal Aviation Administration (FAA) regulations.
- (c) Locking mechanisms to limit radar interference required. All utility-scale 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 Town 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 utility-scale 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 shall be grounded according to applicable electrical codes.
 - (c) Wiring. All wiring between the wind turbines and the Wind Energy Conversion System substation shall be placed underground unless the Town 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 Conversion System 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 Town Board shall determine the acceptable ice throw range based on the activities in the area, location and calculations of the ice throw. The Board shall review, but not be bound by, the calculations and information made available by the Applicant pursuant to Section I A 3(j)(i) in making its determination.

- (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 Utility-Scale WECS shall be evaluated for any significant adverse impact on endangered or threatened fish, wildlife or plant species or their critical habitats based on criteria established by the federal or state regulatory agencies, as determined by the Town of Machias Town Board during SEQRA review. The impact of a utility-scale WECS on migratory birds and bats shall be evaluated and mitigated based on SEQRA findings.

(10) Visual impact.

- (a) No advertising sign or logo shall be placed or painted on any part of any utility-scale wind energy conversion system.
- (b) Wind turbines shall be painted a nonobtrusive (e.g., white, gray or beige) color that is nonreflective. In order to reduce any daytime lighting requirements by the FAA, the Town 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 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 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.

(C) *Decommissioning and site restoration plan and bond.*

- (1) The applicant shall submit a decommissioning and site restoration plan, including cost estimate, to the Town Board for its review and approval prior to the approval of any 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 utility-scale 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. Any variation from the submitted decommissioning plan must be approved by the Town Board.

- (2) As a condition of permit approval, the Town 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 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 New-York-State 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 permit.
- (6) The applicant and his/her successors, or assigns in interest, shall maintain the required bond funds for the duration of the Wind Energy Permit.

(D) Road bond.

- (1) Construction of WECS poses potential risks because of the large size of construction and transport 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: minimizing traffic impacts from construction and delivery vehicles; minimizing WECS-related traffic during times of school bus activity; minimizing wear and tear on local roads; and 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, and mitigating road use impact on business operations.
- (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 to be 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.

(E) 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. This shall be provided prior to the issuance of the Wind Energy Permit.
- (2) 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 Electrical Code that have been adopted by New York State. This shall be provided prior to the issuance of the Wind Energy Permit.
- (3) 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 Wind Energy Permit.
- (4) Certification of seismic design. The applicant shall provide post construction certification from a licensed professional engineer registered in the State of New York that the design and construction protects against anticipated seismic hazards. This certification shall be provided to the Building Inspector and shall be maintained in a permanent file
- (5) Post construction certification. 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 Towns Code Enforcement Officer and shall be maintained in a permanent file.

(F) Liability insurance.

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. Such policy shall provide coverage of not less than \$5,000,000 and shall name the Town of Machias as an additional named insured. The sponsor shall provide the Town annually with proof of continuing coverage in compliance with this requirement.

(G) *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 Wind Energy 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 Wind Energy Permit is originally issued, and subsequent owners, shall provide notification to the Town Clerk 90 days prior to the change of ownership.

(H) *Inspections.*

Unless waived by the Town 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 Officer that the wind turbine, tower or pole may have sustained structural damage. A copy of the inspection report shall be submitted to the Town. Any fee or expense associated with this inspection shall be borne entirely by the permit holder.

(I) *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 section and other Wind Energy 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 section, the owner/operator shall remedy the situation within 90 days after written notice from the Code Enforcement Officer. The Town Board may extend this period by another ninety-day period, for a total period not to exceed 180 days.
- (3) Upon notice from the Code Enforcement Officer or Town Board that the WECS is not repaired or made operational or brought into permit compliance after said notice pursuant to Subsection (2) above, the Town 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 Town Board may either:

- (a) Order compliance within a stated timeframe; or
- (b) Revoke the Wind Energy Permit and order removal of the WECS to commence within 90 days and site remediation pursuant to the approved decommissioning and site restoration plan.

(J) *Decommissioning.*

- (1) Nonfunctional and/or inoperative Utility Scale WECS defined.
 - (a) If any utility-scale WECS, or turbines remains nonfunctional or inoperative for a continuous period of one year, the permittee shall remove the WECS at the permittee's own expense and restore the site, in accordance with the approved decommissioning and site restoration plan. A utility-scale WECS shall be deemed nonfunctional and/or inoperative if it has not generated commercial power within the preceding 12 months.
 - (b) The Code Enforcement Officer may request that the applicant periodically submit documentation reporting the power output generated by the WECS.
- (2) Use of decommissioning bond.
 - (a) Any nonfunctional or inoperative utility scale WECS, or any utility scale WECS for which the 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 nonfunctional or inoperative, as defined above, or of the revocation of the 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 permittee by accepting the permit authorizes the Town Board to contract for such removal and restoration and to 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 permit holder for the costs over and above the amount of the bond.

(K) Town Board action.

The Town Board may grant the Wind Energy Permit, deny the Wind Energy Permit or grant the Wind Energy Permit with written stated conditions. Denial of the Wind Energy Permit shall be by written decision based upon substantial evidence submitted to the Town Board. Upon issuance of the Wind Energy Permit, the applicant shall obtain a building permit for each structure as required.

Prior to issuing a Wind Energy Permit for a Utility-Scale WECS, the Town Board shall make all of the following findings:

- (a) The proposed Utility-Scale WECS project is consistent with the Town of Machias local laws.
- (b) The proposed Utility-Scale WECS project will not unreasonably interfere with the orderly land use and development plans of the Town of Machias.
- (c) That the benefits to the applicant and the public of the proposed Utility-Scale WECS project will exceed any burdens to the Town and residents therein.
- (d) That the proposed Utility-Scale WECS project will not be detrimental to the public health, safety or welfare of the community.

(L) Amendments to approved use permit.

Any changes or alterations to the WECS, after approval of the Wind Energy Permit and site plan, other than routine repair or maintenance of the original towers and turbines installed, shall require amendment to the Wind Energy Permit. Such amendment shall only be made in the discretion of the Town Board after a public hearing. The amendment shall be subject to all the requirements of this section and any additional requirements reasonably related to the changes or alterations.

(M) Host Community Agreement

All Wind Energy Permits allowed under this Law will be conditioned on the approval by the Town Board of a Host Community Agreement to be negotiated between the Town and the Applicant.

II. SMALL-SCALE WIND ENERGY CONVERSION SYSTEM.

Any WECS which will have only 1 turbine and such turbine shall not be taller than 150 feet as measured from the base of the pole at the surface of the ground to the apex of the blade, and or whose maximum combined output, as shown by the manufacturer's rated capacity, shall not exceed 10 kW per hour shall be required to comply with the regulations for Small-Scale Wind Energy Conversion Systems. A WECS whose capacity is between 10 kW per hour and 100KWh may apply permission to be treated as a Small Scale WECS for purposes of this application process for a Wind Energy Permit under this section.

(A) Application process.

Prior to construction of any Small-Scale Wind Energy Conversion System, the project proponent shall first obtain a Wind Energy Permit and site plan approval from the Town of Machias Town Board and a building permit from the Town's Code Enforcement Officer.

- (1) All applications for a Small-Scale WECS Wind Energy Permit 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 tower's design is sufficient to withstand wind loading requirements for structures as established by the New York State Building Code, if applicable
 - (d) Evidence that the proposed tower height does not exceed the height recommended by the manufacturer or distributor of the system.

- (e) Turbine information: specific information on the type, size, height, rotor material, rated power output, performance, safety and noise characteristics of the 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, if applicable.
- (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 pursuant to 6 NYCRR 617 et seq.
- (l) Such additional information as may be reasonably requested by the Town Board for a complete understanding of the proposed project.
- (m) The Town Board may determine that not all of these applications are necessary for a particular proposed project.
- (n) A flat fee of \$150 per tower.

(B) Permit issued by the Town Board.

Pursuant to the procedures and standards contained in this subsection, the Town Board may issue a Wind Energy Permit to allow a small-scale WECS where the maximum turbine output, as shown by the manufacturer's rated capacity, exceeds 10 kW per hour, but does not exceed 100 kW per hour.

(C) Application requirements.

An applicant for a small-scale WECS that has an output exceeding 10 kW per hour but less than 100 kW per hour shall apply to the Town Board for a Wind Energy Permit. Application materials shall include:

- (a) All the information listed in Subsection II(A) above.
- (b) Full environmental assessment form.

- (c) Any additional information that may be reasonably required by the Town Board for an understanding of the project.

(D) Application review.

The Code Enforcement Officer shall review the application for compliance with the conditions and the concerns set forth in this part.

Standards for small-scale WECS.

- (a) Minimum lot size. A small-scale WECS shall be located on a lot that is a minimum of 1 1/2 acres in size.
- (b) Significant ridgelines. A WECS shall not be located on any ridgeline designated as "significant" on the Town of Machias Map.
- (c) Only one small-scale WECS shall be allowed per prime lot . The system shall be primarily used to reduce the on-site consumption of electricity.
- (d) Height. The turbine, measured to the apex of the blade, is not taller than 150 feet.
- (e) Capacity. The maximum turbine output, as shown by the manufacturer's rated capacity, shall not exceed 100 kW per hour.
- (f) Setbacks. The small-scale WECS shall be set back a minimum of 3.5 times the total height of the WECS from:
 - i. Any residence in existence at the time the application is made, except for the residence on the owner's lot.
 - ii. Property lines of the site on which the structure is located.
 - iii. The right-of-way of public roads.
- (g) Visual impact. In order to reduce visual impact, the WECS shall be painted a nonreflective, unobtrusive color that blends the system and its components into the surrounding landscape to the greatest extent possible.
- (h) 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).
- (i) Signage. No advertising sign or logo shall be placed or painted on any turbine or tower. The Town Board may allow the placement of the manufacturer's logo on a ground-level structure in an unobtrusive manner.

- (j) Safety and security requirements. All small-scale WECS shall adhere to the following safety and security requirements:
- i. 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 overspeed control design and fabrication with good engineering practices shall be certified by the manufacturer.
 - ii. Grounding. All structures which may be charged with lightning shall be grounded according to applicable electrical codes.
 - iii. Wiring. All wiring associated with the Wind Energy Conversion System shall be installed underground within the fall zone. This standard may be modified by the Town Board if the terrain is determined to be unsuitable due to reasons of excessive grading, biological impacts or similar factors.
 - iv. Ground clearance. The blade tip of any wind turbine shall, at its lowest point, have ground clearance of not less than 30 feet.
 - v. Climb ability. Wind turbine towers shall not be climbable up to 15 feet above ground level and/or other appropriate methods of access control shall be provided.
 - vi. 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 aboveground electric transmission or distribution lines. The point of attachment for the guy wires shall be enclosed by a fence six feet high or sheathed in bright orange or yellow covering from three to eight feet above the ground. The minimum setback for the guy wire anchors shall be 10 feet from the property boundary.
 - vii. Signage. Appropriate warning Signage shall be placed on wind turbine towers and electrical equipment. Signage shall also include one twenty-four-hour emergency contact number to the owner of the wind turbine, as well as signage warning of electrical shock or high voltage and harm from revolving machinery.
- (k) 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 small-scale wind energy conversion system. If all such approvals have not been received at the time that the Town Board considers the application

for a a permit, receipt of these other agency approvals shall be a condition to be completed prior to the issuance of a building permit.

- (1) Noise standard.
 - i. Audible noise standard. Wind turbine operations shall not cause the noise level at the boundary of the proposed project site to exceed 30 dB(A) for more than five (5) minutes out of any one-hour time period or to exceed 40 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).
 - ii. Low-frequency noise. A small-scale Wind Energy Conversion System 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.
- (m) Interference with television, microwave and radio reception. The 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.
- (n) Erosion control. Prior to granting a permit for a small-scale WECS, the Town Board shall determine that the erosion and sedimentation control plan is adequate.

(E) Town Board action on application.

The Town Board shall receive a report from the Code Enforcement Officer on any application for a Small Scale WECS permit. After consideration of the application the Town Board may grant the Wind Energy Permit, deny the Wind Energy Permit or grant the Wind Energy Permit with written stated conditions. Denial of the Wind Energy Permit shall be by written decision based upon substantial evidence submitted to the Board. Upon issuance of the Wind Energy Permit, the applicant shall obtain a building permit for the small-scale WECS prior to installation.

Prior to issuing a permit for a small-scale WECS, the Town Board shall make all of the following findings:

- (a) The proposed WECS project will not unreasonably interfere with the orderly land use and development plans of the Town of Machias.
- (b) The proposed WECS project will not be detrimental to the public health, safety or welfare of the community.

(F) *Amendment to approved use permit.*

Any changes or alterations to the wind energy conversion system, after approval of the permit, other than routine repair or maintenance of the original towers and turbines installed, shall require amendment to the permit by the Town Board. Such amendment shall be subject to all the procedural requirements and standards of this section.

(G) *Permit revocation.*

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 Wind Energy Permit shall constitute grounds for the revocation of the permit, after a public hearing.

(H) *Abandonment of use.*

- (1) All small-scale WECS shall be maintained in good condition and in accordance with all requirements of this section.
- (2) Any WECS which is not used for 12 consecutive months shall be deemed abandoned and 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 cost will be added as a charge to the tax levy of the property.
- (3) 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 Wind Energy Permit shall constitute grounds for the revocation of the permit, after a public hearing.

(I) *Assessment.*

A small-scale wind energy conversion system shall be subject to assessment by the Town of Machias.

III. REAL PROPERTY TAX LAW SECTION 487

The Town of Machias reserves the right to require the owner of a wind energy conversion system to enter into a contract for payments in lieu of taxes as a requirement of receiving a Wind Energy Permit. Such payment is in addition to, and not in lieu of, any payment required under a Host Community Agreement.

(Complete the certification in the paragraph that applies to the filing of this local law and strike out that which is not applicable.)

1. (Final adoption by local legislative body only.)

I hereby certify that the local law annexed hereto, designated as local law No. 1 of 2010 of the ~~(County)(City)(Town)(Village)~~ of Machias Town Board on October 14, 2010, in accordance with the applicable provisions of law.

2. (Passage by local legislative body with approval, no disapproval or repassage after disapproval by the Elective Chief Executive Officer*.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20____, and was (approved)(not approved) (repassed after disapproval) by the _____ and was deemed duly adopted on 20 , in accordance with the applicable provisions of law.

3. (Final adoption by referendum.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20____, and was (approved)(not approved) (repassed after disapproval) by the _____ on _____ 20____.

Such local law was submitted to the people by reason of a (mandatory)(permissive) referendum, and received the affirmative vote of a majority of the qualified electors voting thereon at the (general)(special)(annual) election held on _____ 20____, in accordance with the applicable provisions of law.

4. (Subject to permissive referendum and final adoption because no valid petition was filed requesting referendum.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20____, and was (approved)(not approved) (repassed after disapproval) by the _____ on _____ 20____. Such local law was subject to permissive referendum and no valid petition requesting such referendum was filed as of _____ 20____, in accordance with the applicable provisions of law.

* Elective Chief Executive Officer means or includes the chief executive officer of a county elected on a county-wide basis or, if there be none, the chairperson of the county legislative body, the mayor of a city or village, or the supervisor of a town where such officer is vested with the power to approve or veto local laws or ordinances.

5. (City local law concerning Charter revision proposed by petition.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the City of _____ having been submitted to referendum pursuant to the provisions of section (36)(37) of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of such city voting thereon at the (special)(general) election held on _____ 20____, became operative.

6. (County local law concerning adoption of Charter.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the County of _____ State of New York, having been submitted to the electors at the General Election of November _____ 20____, pursuant to subdivisions 5 and 7 of section 33 of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of the cities of said county as a unit and a majority of the qualified electors of the towns of said county considered as a unit voting at said general election, became operative.

(If any other authorized form of final adoption has been followed, please provide an appropriate certification.)

I further certify that I have compared the preceding local law with the original on file in this office and that the same is a correct transcript therefrom and of the whole of such original local law, and was finally adopted in the manner indicated in paragraph 1 above.

Gail Watkins

Clerk of the county legislative body, City, Town or Village Clerk or officer designated by local legislative body

Date: 10/26/2010

(Seal)

(Certification to be executed by County Attorney, Corporation Counsel, Town Attorney, Village Attorney or other authorized attorney of locality.)

STATE OF NEW YORK
COUNTY OF ALLEGANY

I, the undersigned, hereby certify that the foregoing local law contains the correct text and that all proper proceedings have been had or taken for the enactment of the local law annexed hereto.

David C. Brantigan

Signature
Attorney for the Town

Title

~~County~~
~~City~~ of Machias
Town _____
~~Village~~

Date: October 29, 2010