

Town of Machiasport Wind Energy Facility Ordinance

Section I. Purpose and Intent

The purpose of this Ordinance, consonant with M.R.S.A. 30-A Sec.3001, is to provide for the construction and operation of Wind Energy Facilities in the Town of Machiasport, Maine, subject to conditions and requirements that will protect the public's safety, health, and welfare.

Section II. Essentials

(a). It shall be unlawful and a violation of this Ordinance to begin construction, operation, or modification of a Wind Energy Facility without a Site Permit and Operation License. Similarly, it shall be unlawful to undertake actions which violate or fail to comply with an approved permit or license including conditions that may have accompanied issuance of a license.

(b). Wind Energy facilities shall be constructed only at locations which afford five thousand two hundred eighty (5,280) feet of separation from the nearest Protected Location.

(c). Machiasport Fire Protection: The Applicant shall prepare a plan in consultation with the Town of Machiasport Fire Department as part of the permitting process. The plan shall address all activities at the Wind Turbine Generator from the start of construction through the end of power generation and the final removal and restoration of the site, and shall discuss a response plan to address all identified potential fire, rescue, and hazardous material scenarios. The Owner/Operator shall ensure the Wind Turbine Generator complies with the following control and prevention measures and assumes responsibility for all associated incremental costs:

- Use of fireproof or fire resistant building materials and buffers or fire retardant landscaping around Wind turbine generator as appropriate.
- Incorporation of a self-contained fire protection system to address nacelle fires, including but not limited to redundant fire quenching systems in the nacelle.
- Maintenance of firebreak areas as appropriate, cleared of vegetation and maintained as a fire/fuel break as long as the wind turbine is in operation.
- Provision for any additional fire fighting or rescue personnel, services, training materials, or vehicles as may be required to address any emergency related to Wind Turbine Generator that is beyond the current capabilities and duties of the local fire department.

(d). The Machiasport Planning Board shall from time-to-time define fees for Permits and Licenses required by this Ordinance. Fees will be listed in an attachment.

(e). The burden of compliance with all aspects of this Ordinance is on the Applicant; e.g., the prospective Owner-Operator of a Wind Energy Facility. Approval of a Site Permit or Operation License by the Planning Board does not relieve the applicant from compliance with Ordinance demands that may be un-mentioned in the Permit or License.

(f). For a specific property, one or more provisions of this Ordinance may be waived at the

land owner's discretion. Waivers shall be memorialized at the Washington County Registry of Deeds with an addendum to or modification of the owner's deed. Machiasport officials shall not waive Ordinance requirements except in the circumstances cited in the Ordinance.

(g). If there is a conflict between provisions of this Ordinance, the more stringent shall apply. Conflicts between this Ordinance and other Machiasport ordinances shall be resolved in favor of this Ordinance. Should a Court declare invalidity of any part of this Ordinance such declaration shall not invalidate other parts of the Ordinance or the Ordinance as a whole.

(h). The name, address, and telephone number of the individual or firm proposing to apply for a turbine site permit or an operation permit shall be filed with the Machiasport Planning Board. The individual who will direct or manage a proposed facility shall also be identified. The applicant or his designee shall publicize a telephone number and name an individual to respond to citizen inquires and complaints throughout the life of a Wind Energy Facility. Complaints shall be identified to the town Code Enforcement Officer and resolved within seven (7) days thereafter.

(i). Construction and operation of a Wind Energy Facility shall be undertaken only when the applicant has submitted estimated costs of the project, and the cost of removing the obsolete, unused, or defective Facility. A demonstration in the form of a performance bond, surety bond, letter of credit or other financial instrument, acceptable to the Machiasport Planning Board, has been created to assure that the Applicant will have the funds necessary to complete the project and to remove the Wind Energy Facility at the end of its useful life. At the discretion of the Planning Board, an Independent Engineering Agency may be hired to assist the Planning Board in developing this section of the Ordinance as relates to removal of the Tower.

(j). Wind Turbine Generators that have a taxable property value of greater than \$10 million dollars; or, if the project will be qualified as a "designated business" for the purposes of state tax incremental financing as defined in Title 30-A M.R.S.A. 5241, are required to have a written agreement between the Town of Machiasport and the Owner/Operator designating the financial methodology that will be used for tax purposes (Tax Valuation Agreement). The Tax Valuation Agreement must be in a format approved by the Town attorney and comply with all applicable state and federal tax codes and laws. The Tax Valuation Agreement must include a financial projection of the tax valuation for the useful life of the project and be prepared by a qualified CPA and reviewed by a qualified tax attorney selected by the Town and paid for by the Applicant. A Tax Impact statement must be prepared and presented to the Town. It will contain year-by-year for 10 years estimated of Machiasport residents' tax burden using the following data: 1) re-appraised values for all residents within 2 miles of the Wind Turbine Generators, 2) State re-assessment for school tax amounts (assume constant school budget and constant contributions fro Towns other than Machiasport), 3) other resident's properties are presumed to stay at their same value. This Tax Impact Statement will be prepared by an Accountant hired by the Town at Owner/Operator's expense. The Tax Impact Statement will be presented to the Town for information.

(k). Each Wind turbine shall be equipped with an over speed control system that includes both an aerodynamic control such as stall regulation, variable blade pitch, or similar system, and a mechanical brake that operates in fail-safe mode.

(l). Permit application shall be submitted to the Code Enforcement Officer who may perform an initial review of application completeness. Within thirty (30) days after application submission and in consultation with the Machiasport Planning Board and staff, the Code Enforcement Officer shall notify the Applicant that his material is complete or that it is incomplete. The Code Enforcement Officer shall document the applicant deficiencies inspiring a rejection without implying that all problems are listed.

(m). Permit review authority lies with the Code Enforcement Officer and the Planning Board as indicated in the table below (Section IV). With assistance of existing staff and/or consultants, the review authority shall determine completeness of the application within thirty (30) days after submission. Upon acceptance of a complete application, its approval or rejection shall occur within ninety (90) days after the associated public hearing.

(n). In reviewing an application for compliance with this Ordinance, the Machiasport Planning Board and Code Enforcement Officer may retain professional services including but not limited to attorneys and technical consultants to verify data presented. A professional fees escrow shall be established by applicant: one half of one percent of the estimated cost of the project with a minimum balance of \$25,000,000 at all times. The fees escrow shall be maintained for 2 years after the project completion. The fees escrow may be returned to the applicant at this time.

(o). Ten (10) days prior to any meeting at which a Wind Energy Facility permit application is to be considered, the Machiasport Planning Board shall notify the Applicant and owners of property abutting the proposed Facility site of the intent to consider a permit application and shall post a similar notice for the general public. The notice shall state the proposed Facility location, type of permit, and the date, time, and place where consideration will take place.

During the hearing, the Planning Board shall list and describe Ordinance provisions which the Board proposes to modify.

(p). If the Applicant proposes changes to a pending application after a public hearing has occurred, the Machiasport Planning Board may continue the review process without a renewed public hearing if it determines that the proposed changes do not materially affect the application. Should the Planning Board determine that the proposed changes involve potential adverse effects in addition to or distinct from those addressed in the initial application, another public hearing shall be scheduled within thirty (30) days of that determination.

(q). Permits shall expire: 1) two years after the date of approval unless a substantial start on construction has occurred and: 2) three years after the date of approval if construction incomplete. If a permit for a Type 2 or Type 3 Wind Energy facility expires, the applicant shall implement pertinent provisions of the approved decommissioning plan. Upon the Applicant's written request, the Town reviewing authority may extend either or both

expiration time limits by one year.

(r). The Code Enforcement Officer and hired technical consultants shall have access to a Wind Energy Facility site at all times to review pertinent records and documents and physical construction of the facility.

(s). Any person aggrieved by a decision of the Code Enforcement Officer or the Machiasport Planning Board may appeal to the Machiasport Board of Appeals for modification or reversal of an aggravating requirement.

Section III. Effective Date

This Ordinance is effective as of June 27, 2016.

Section IV. Classification of Wind Turbines and Meteorological Towers.

For the purpose of classification, Wind Turbine Generators are classified according to the following definitions:

(a). Type 1 – Small Wind Turbine means a single wind Turbine with a nameplate capacity less than 10kW and turbine height less than 100 feet. This ordinance does not apply to these. (See Small Wind Ordinance).

(b). Type 2 – Intermediate Wind Turbine means a single wind turbine with a nameplate capacity less than 100kW and a turbine height less than 100 feet, and not requiring a Site Location of Development permit from the Maine Department of Environmental Protection (DEP) pursuant to Title 35-A M.R.S.A. 3456. This ordinance does not apply to these.

(c). Type 3 – Large Wind Turbine means up to three wind turbines with a nameplate capacity less than 1mW, and a turbine height less than 300'. A Location of Development permit from the Maine Department of Environmental Protection (DEP) pursuant to Title 35-A M.R.S.A. 3451, Title 35-A M.R.S.A. 3456 and Title 38 M.R.S.A. 482 is normally required unless the Wind Turbine: 1) does not sell or convert electricity for off site use including net metering; and, 2) does not qualify as a Structure with a total land area in excess of 3 acres for the entire Wind Turbine Generator.

For the purpose of this Ordinance, included in the Type 3 – Large Wind Turbine shall be any turbine(s) of nameplate capacity equal to or greater than 100kW and a turbine height greater than 150 feet if the energy generated is for sale or use by a Person other than the generator.

(d). Type 4 – Industrial Wind Turbine means one or more wind turbines each with a nameplate capacity of greater than or equal to 1mW, or a turbine height greater than or equal to 300'; or more than three Type 3 Wind Turbines. A Location of Development permit from the Maine Department of Environmental Protection (DEP) pursuant to Title 35-A M.R.S.A. 3451, Title 35-A M.R.S.A. 3456 and Title 38 M.R.S.A. 482 is normally required unless the Wind Turbine: 1) does not sell or convert electricity for off site use including net metering; and, 2) does not qualify as a Structure with a total land area in

excess of 3 acres for the entire Wind Turbine Generator.

(e). Meteorological Towers (MET Towers) MET towers shall be permitted at the discretion of the Machiasport Planning Board, with no height limitations, other than those imposed under State or Federal law. A permit for a temporary MET tower shall be valid for a maximum of five years. The site shall be restored to its original condition within 30 days following removal of the tower.

Section V. General Requirements

Context and Narrative

An application shall include a narrative describing a proposed Wind Energy Facility, or modification, that includes the number and aggregate generating capacity of all Wind Turbines, the Turbine height and manufacturer's specification for each Turbine (including but not limited to the make, model, maximum generating capacity, sound emission levels and type of over speed controls) and a description of Associated Facilities. Location maps shall be provided showing boundaries of the proposed facility site and all contiguous property under total or partial control by the Applicant and Participating land owners. Historic and Scenic sites within five thousand two hundred eighty (5,280) feet of the proposed site shall be identified.

Safety Setback

Wind Turbines shall be setback a horizontal distance equal to 200% of the Turbine Height from Facility property boundaries, public and private rights-of-way, and overhead utility lines that are not part of the Proposed Facility; except, the Town review and approval authority may allow a reduced setback if the Applicant submits in writing 1) a waiver of the property setback requirement signed by the pertinent abutting land owner or, 2) evidence such as operating protocols, safety programs, or recommendations from the equipment manufacturer or a licensed professional engineer having relevant experience with Wind Turbines, that demonstrates that the reduced setback does not compromise safety of adjacent Protected Locations existing at the time of application

Building Standards

All components of the Wind Energy Facility shall conform to relevant local and State building codes.

Access

All ground- mounted electrical and control equipment and all access doors to a Wind Turbine shall be labeled and secured to prevent unauthorized access. A wind tower shall not be climbable up to a minimum of fifteen (15) feet above the ground surface.

Danger warning signs shall be posted on all Associated Facilities at ground level where voltages greater than 120 volts may be encountered.

Natural Resources

A Wind Energy Facility shall not have an unreasonable adverse effect on rare, threatened, or endangered wildlife, significant wildlife habitat, threatened or endangered plants, and

rare and exemplary plant communities. The Machiasport authority reviewing the permit application shall seek the written comments or recommendations of the Maine Department of Inland Fisheries and Wildlife Environmental Coordinator and Maine Natural Areas Program.

Erosion Control

Erosion of soil and sedimentation shall be minimized by employing “best management practices” as found in the Maine Erosion Control Handbook for Construction: Best Management Practices”, March 2003.

Signal Interference

To the extent practical, Wind Turbines should be positioned to avoid and mitigate disruption or loss of radio, television, telephone, cell phone transmitter, and similar signals.

Structure Type

Wind Turbine towers shall be monopoles, with no guy-wires unless, to the satisfaction of the reviewing authority, it is demonstrated that a guy-wired tower is the most practical and economical alternative. Bird flight diverters must be installed on permitted guy-wires.

Building-mounted Wind Turbines are not permitted.

Blade Clearance

The minimum clear distance between ground and Turbine blades shall be twenty-five (25) feet to the lowest position of the base of the blade arc.

Appearance and Visibility

A Wind Turbine shall be a non-obtrusive color such as white, off-white, gray, or as otherwise may be required by another government agency with jurisdiction over the Wind Energy facility.

A Wind Turbine shall not exceed 400’ to the highest point.

A Wind Turbine shall not be lighted artificially except to the extent consistent with the Federal Aviation Administration recommendations using an ADLS System (Air Craft Detection Lighting System) for safety lighting.

A Wind Turbine tower shall not be used to support advertising signs apart from reasonable and incidental identification of the turbine manufacturer, facility owner and operator, and safety warnings.

To the extent that doing so does not inhibit adequate access to the wind resource, each Wind Turbine shall be located to maximize effectiveness of existing vegetation, structures, and topographic features in screening views of a Wind Turbine from Protected Locations and Scenic Resources.

When existing features do not screen views of a Wind Turbine from Protected Locations and Scenic Resources screening may be feasible via planting of trees and shrubs. Plantings should be native varieties placed as close as possible to the point from which the Turbine is

viewed.

Electrical Components

All electrical components of a Wind Energy Facility shall be installed to comply with applicable local, state, and national codes.

Discontinued Use

A Wind Energy Facility that has not generated electric power for twelve (12) consecutive months shall be deemed discontinued and shall be removed from the property within one hundred twenty (120) days after receipt of notice from the Code Enforcement Officer; this requirement may be waived if the Applicant provides the reviewing authority with information demonstrating that the facility has continuing value. Upon removal of a facility, the owner shall pay all costs including for the site reclamation deemed reasonable; i.e., road removal, vegetation and tree restoration, etc.

VI. Standards for Type 3 and Type 4 Wind Energy Facilities

Sound Level Prediction

The level of sound that may emanate from a proposed Wind Energy Facility shall be estimated using the best available mathematical model of sound distribution from the Facility. The model theoretical basis and structure shall be documented and shall include effects of topology, wind speeds and directions, likely meteorological conditions, and such physical elements (forested areas, large buildings, pond areas, etc.) as may be significant in the model. The computer code and operating instructions shall be provided to the review authority upon request.

(a). Pertinent Locations

Wind Energy Facility sound levels shall be estimated at each Protected Location within one mile (5,280 feet) of the Facility. The side or region of the Protected Location that is nearest or otherwise most likely to receive the highest sound level should be the subject of estimation.

(b). Acceptable Sound Levels

For any Protected Location in an area that is, or will be, predominantly residential, the sound limit shall be 45 dbA at all times. Short Duration Repetitive Sounds, at all times, shall not exceed 48dbA.

For any Protected Location in an area that is, or will be, predominantly commercial, transportation, or commercial the limit shall be 50 dbA at all times. Short Repetitive Sounds, at all times, shall not exceed 56 dbA.

At any property line of the facility site or contiguous participating property, the acceptable sound level shall be 65 dbA or less at all times of the day.

Sound Level Management

Prior to facility construction and as part of the data submitted when a Site Permit is sought, ambient sound levels shall be measured at all Protected Locations within one mile (5,280 feet) of a proposed facility location. The time or times of measurement shall be those

when ambient levels are expected to be least and when they are greatest. The seasons of the year and possible meteorological effects shall be considered when choosing measurement times.

When facility construction is complete and the Wind Turbine is ostensibly in normal operation, sound measurements shall be made and recorded for all Protected Locations where predicted sound levels are within five (5) dbA of required values. The time or times of measurement shall be those when the Wind Turbine noise is greatest, again with consideration of seasons and meteorological effects.

Measurements shall be supervised by personnel who are well-qualified by training and experience in the measurement and evaluation of environmental sound. Costs associated with measurements shall be assumed by the Wind Turbine Facility owner.

Based upon neighbor complaints or on the initiative of the Code Enforcement Officer, after a Wind Turbine is operational, sound level measurement shall be conducted at Protected Locations. If measured levels are 3 dbA or greater than mandated levels for one hour or more, the mill shall be shut down. During a subsequent year, the mill may be operated only to test effectiveness of noise abatement modifications made to the mill. If the mandated sound levels are achieved, the mill may be put into full operation.

Should no satisfactory noise abatement be achieved during the year, the mill shall be removed. If the turbine operator can demonstrate that an impending modification will silence the turbine, removal of the mill may be postponed at the discretion of the Planning Board.

Sound measurement procedures and apparatus shall be as defined in American National Standards Institute S12.9, Quantities and Procedures for Description and Measurement of Environmental Sound.

Flicker

Shadow flicker, caused by moving Wind Turbine blades and the sun, shall be estimated for all Protected Locations within one mile (5280 feet) distance from a proposed facility. Estimations shall derive from assumed duration of worst positions of the sun and screening effects of trees in leaf and without leaves. Worst case estimation flicker duration shall be less than thirty (30) hours per year at all Protected Locations.

Reflections (glint) from Wind Turbine blades shall be minimized with non-reflective coatings on the blades.

Public Hearing

Type 3 and Type 4 permit applications will be subject to public hearing and vote.

Required Application Data

(a). A receipt attesting to payment of the application fee together with the applicant's affirmation that the proposed Facility will be designed and in compliance with this Ordinance and any conditions of approval.

- (b). An estimate of total cost for Facility construction together with a description of the financial arrangement that will assure availability of necessary funds. The cost of removing an obsolete or defective Wind Turbine and Tower shall be included in the estimate.
- (c). Certificates of design compliance obtained by the equipment manufacture from underwriters Laboratories, Det Norske Veritas, or other similar certifying organization.
- (d). Standard boundary survey of subject property stamped by a Mine-Licensed surveyor.
- (e). A stormwater management plan stamped by a Maine-Licensed surveyor.
- (f). Foundation and Tower anchoring system drawings that are stamped by a Maine-Licensed professional engineer.
- (g). A copy of a deed, easement, purchase option, or comparable documentation demonstrating the Applicant's rights on the proposed Facility site. The address, tax map and number of the proposed facility location together with identification of contiguous parcels owned by Participating Landowners shall be reported. Owner names and addresses of the contiguous Participants shall be documented.
- (h). The names and addresses of non-participants owning parcels (identified by map and lot number, and current usage) which are adjacent to the proposed facility and Participating land owner properties shall be listed and notified by certified mail by the applicant.
- (i). Facility site plans shall be provided showing the proposed location of each Wind Turbine and Associated Facilities. The plans shall encompass all area within one mile (5280 feet) of the proposed facility. It shall indicate parcel boundaries, required setbacks, topographic contour lines (maximum 20- foot interval), public and private roads and rights-of-way, overhead utility lines apart from those integral to the Facility, forested areas, streams, wetlands, water bodies, and areas proposed to be graded or cleared of vegetation.
- The plan's documentation shall include structural drawings of the Tower foundation and anchoring system: a) prepared by the Wind Turbine or Tower manufacturer, b) prepared in accord with the manufacturer's specifications or, c) prepared and stamped by a Maine-licensed professional engineer.
- (j). The minimum and maximum ambient sound levels measured at each Protected Location.
- (k). Photographs of existing conditions at the site shall be provided. Insofar as the site may be visible from Protected Locations within one mile (5280 feet), photographs and Sight Line Representations from those locations shall also be provided.
- (l). Written notice that the Environmental Coordinator of the Maine Department Inland Fisheries and Wildlife and Maine Natural Areas Program have been notified of the pending application. The notification shall include the number, location, and height to the proposed Wind Turbines.

(m). A statement, signed by the Applicant, that certifies that the proposed facility is designed to meet applicable noise standards and acknowledges the Applicant's obligation to take remedial action when informed of a noise violation by the Code Enforcement Officer.

(n). Normal and emergency shutdown procedures shall be described as well as the means for slowing braking, and stopping a Turbine.

(o). Such additional data which the Applicant believes will support the request for a permit.

Public Roads

The Applicant shall identify all state and local public roads to be used within the Town of Machiasport to transport equipment and parts for construction, operation, and maintenance of a Wind Energy Facility. A qualified third-party engineer acceptable to the Applicant and the Machiasport Planning Board, and paid by the Applicant, shall document road conditions prior to facility construction. The engineer shall similarly document road conditions thirty (30) days after construction is complete.

Any road damage caused by the Applicant's activity during construction and operation of a Wind Energy Facility shall promptly be repaired at the Applicant's expense. The Applicant shall demonstrate to the Machiasport Planning Board the necessary funds are or will be available.

Scenic Resources

The Machiasport Planning Board shall determine, based on the following criteria, whether a Type 3 or Type 4 Wind Energy Facility significantly compromises views from a Scenic Resource that is within five (5) miles of a proposed Facility.

- (a). The significance of the potentially affected resource;
- (b). The existing character of the surrounding area;
- (c). The expectations of the typical viewer;
- (d). The extent, nature, and duration of potentially affected public uses of the Scenic Resource including but not limited to issues related to the number and extent of Wind turbines visible from the resource, the distance from the resource, and the effect of prominent Facility features on the viewscape.

A finding by the Machiasport Planning Board that a Type 3 or Type 4 Wind Energy Facility is a highly visible feature in the landscape is not a solely sufficient basis for concluding that the Facility will have an unreasonable effect on the character and existing uses of the Scenic Resource.

DEP Certification

A Site Application for a Type 3 Wind Energy Facility that will generate power for sale or use by persons other than the Applicant shall include certification from the Maine Department of Environmental Protection relative to 35-A.M.R.S.A. Sec.481 that the Wind

Energy Facility:

- (a). Will meet requirements of the noise control rules adopted by the Board of Environmental Protection pursuant to the Site Location of Development Act.
- (b). Will be designed and sited to avoid unreasonable Shadow Flicker effects.
- (c). Will be constructed with setbacks adequate to protect public safety.

If such certification has not been issued at the time of application, the Applicant shall include evidence that DEP certification has been applied for.

Liability Insurance

The applicant or his designee shall maintain a current liability policy, acceptable to the Machiasport Planning Board, that covers bodily injury and property damage with limits in an amount commensurate with the scope and scale of the Facility.

Appendix A. Definitions

Ambient Sound is at a specified time, the all-encompassing sound associated with a given environment. It is usually a composite of sounds from many sources and directions.

Applicant is the legal entity, including successors and assigns, that files an application under this Ordinance.

Approved Residential Subdivision means a residential subdivision for which all applicable permits have been issued providing that at the time of Facility construction such permits have not expired.

Associated Facilities means those elements of a Wind Energy Facility, other than its Generating Facilities, that are necessary to the proper operation and maintenance of the Wind Energy Facility including, but not limited to, buildings, access roads, electrical substations, and conductors carrying electric power from a Facility.

Construction is the activity and operations associated with implementation of a facility or its expansion.

DEP Certification means a certificate issued by the Maine Department of Environmental Protection pursuant to 35-AM.R.S.A. Sec.3456 for a Wind Energy Development.

Emergency is an unforeseen combination of circumstances requiring immediate action.

Emergency Maintenance and Repairs is the work done in response to an emergency.

Existing Sound Level is the hourly sound level resulting from routine operation of an existing facility prior to the first facility expansion that is subject to this ordinance.

Equivalent Sound Level is the mean-square of the A-weighted sound pressure during a one-hour interval with measurement values recorded at five minute intervals; equivalently

for short time intervals, it is the measured level divided by the duration of the sound.

Generating Facilities means Wind Turbines and electrical connections that are immediately associated with a Wind Turbine, and excluding Generator Lead Lines as defined in 35-A.M.R.S.A. Sec 3132(1-B).

Historic Area means any site, structure, district or archeological site which has been officially included on the National Register of Historic Places, the Maine Historic Inventory, administered by the Bureau of Parks and Lands, or which is established by qualified testimony as being of historic significance.

Hourly Sound Level is the average value reported, during a one-hour period, by and integrating/averaging sound meter meeting Type 1 or Type 2 performance requirements of the American National Standards Institute specifications for Sound Level Meters, ANS1.4-1993.

Locally-designated Passive Recreation Area means any site designated by a municipality for passive recreation that is open and maintained for public use and which: a) has fixed boundaries, b) is owned in fee simple by a municipality or is accessible by virtue of a public easement, c) is identified and described in Machiasport's comprehensive plan at least nine months prior to submission of an Applicant's Wind Energy Facility permit application.

Maximum Sound Level in decibels, is ten time the common logarithm of the square of the ratio of the maximum sound pressure to the reference pressure of 20 micropascals.

Municipal Reviewing Authority means the Machiasport Planning Board or Code Enforcement Officer.

Nacelle is the frame or housing at the top of a Wind Tower that encloses the gearbox and generator.

Non-Participating Landowner means any landowner with property within 500 feet of a proposed facility who chooses not to participate in siting and operation of a Wind Energy Facility.

Occupied Building means a residence, school, hospital, house of worship, public library, or similar building that is in use as a primary residence or is customarily frequented by the public during daylight and early evening hours; for consideration as such the building must be occupied at the time of facility permit application.

Participating Landowner means one or more persons that hold title in fee or a leasehold interest with sublease rights to property on which a Wind Turbine, or Turbines, and Associated Facilities are proposed to be located pursuant to an agreement with the Applicant or an entity that has entered into an agreement with the Applicant allowing the Applicant to demonstrate the requisite right, title, and interest in such property.

Person means an individual, corporation, partnership, firm, organization or other legal

entity.

Planned Residence means a Residence building for which all applicable building and land use permits have been issued provided that at the time of Facility construction such permits have not expired.

Protected Location means any location that is:

- 1) accessible by foot, on a parcel of land owned by a Non-Participating Landowner containing a residence or planned residence, and approved residential subdivision, house of worship, academic school, college, library, duly licensed hospital or nursing home, etc. near the Facility site at the time a Wind Energy Facility permit application is submitted under this Ordinance;
- 2) within a State Park, Baxter State Park, a National Park, a nature preserve owned by a land trust, the Maine Audubon Society or the Maine chapter of the Nature Conservancy, the Appalachian Trail, the Moosehorn National Wildlife Refuge, a federally designated wilderness area, a state wilderness area designated by statute, a municipal part or a locally-designated passive recreation area, or any location within consolidated public reserve lands designated by rule by the Bureau of Public Lands as a Protected Location;
- 3) a hotel, motel, campsite or duly licensed campground that the Planning Board Has designated a Protected Location after determination that the health and welfare of guests or the economic viability of the establishment will be unreasonably affected by the noise in excess of the limit mandated for the type of Wind Energy Facility. The term does not include buildings and structures located on leased camp lots owned by the Applicant for seasonal purposes.

Residence means a building or structure, including manufactured housing, maintained for permanent or seasonal residential occupancy providing living, cooking, and sleeping facilities and having a permanent indoor sanitary facility. Recreational vehicles, and tents, and watercraft are excluded from this definition.

For purposes of this ordinance, (1) a Residence is considered planned when the owner of a parcel of land on which the residence is to be located has received all applicable land use permits and the time for beginning construction under such permits has not expired, and (2) a residential subdivision is considered approved when the developer has received all applicable land use permits for the subdivision and the time for beginning construction has not expired.

Routine Operation is regular and current operation of regulated sounds sources associated with the purpose of the facility

Scenic Resource means either a Scenic Resource of state or national significance, as defined in 35-AM.R.S.A. Sec 3451(9) or a Scenic Resource of local significance located within the Town of Machiasport and identified as such in the town comprehensive plan, and open space plan, or a scenic inventory adopted by Town Meeting.

Shadow Flicker means alternating changes in light intensity caused by the movement of

Wind Turbine blades casting shadows on the ground or other stationary objects.

Short Duration Repetitive Sounds means a sequence of sounds which occur more than once within one hour, each clearly discernable as an event and causing a significant sound level increase, on the fast meter response, above the sound level immediately before and after each event.

Sight Line Representation means a profile drawing or photograph showing prominent features, including but not limited to topography, buildings, and trees along a line of sight extending from an observer's eye to the lowest point visible on a proposed or existing Turbine Tower.

Significant Wildlife Habitat means Significant Wildlife Habitat as defined in 38M.R.S. Sec. 480-B(10).

Sound Level is ten times the common logarithm of the square of the ratio of a frequency-weighted and time-exponentially averaged sound pressure to the reference level of 20 micropascals. For the purpose of this Ordinance, sound level measurements are obtained using the A-weighted frequency band and fast dynamic response of the measuring system unless otherwise noted.

Sound Pressure is the root-mean-square of the instantaneous sound pressures in a frequency band and during a specified time interval; expressed in pascals.

Sound Pressure Level in decibels is ten times the common logarithm of the square of the ratio of the sound pressure to the reference pressure of 20 micropascals.

Substantial Start means that construction shall be considered substantially underway when work beyond excavation including but not limited to the pouring of a slab or footings, the installation of piles, the construction of columns, or the placement of Tower on a foundation has begun.

Tonal Sound is, for the purpose of this Ordinance, a tonal sound exists if the one-third octave band containing a tone has a sound pressure exceeding the arithmetic average of the sound pressure levels in the two contiguous one-third octave bands by 5dB for frequencies between 500Hz and 10,000Hz, by 8dB for frequencies at or between 160 and 400Hz, and by 15dB for Frequencies between 25Hz 125Hz.

Tower means the free-standing structure on which a wind conversion system is or will be mounted.

Turbine Height means the distance measured from the surface of the Tower foundation to the highest point of any turbine blade measured at the highest arc of the blade.

Wind Energy Facility means a facility that uses one or more Wind Turbines to convert wind energy to electrical energy. A Wind Energy Facility includes Generating Facilities and Associated Facilities.

Wind Turbine means an apparatus for the conversion of wind energy into electrical energy; a Wind Turbine is conventionally mounted on a Tower.

(Additional acoustic terms used in association with this Ordinance shall be interpreted in accord with the following American National Standard: Quantities and Procedures for Description and Measurements of Environmental Sound, Part 1;
NASI S12.-1998 - American National Standard: Quantities and Procedures for Description and Measurements of Environmental Sound, Part 1;
ANSI S3.20-1973 - American National Standard Psychoacoustical Terminology;
ANSI S1.1-1960 - American National Standard Acoustical Terminology.)

Appendix B. Construction and Maintenance Noise

All equipment used in construction and maintenance of a Wind Energy Facility shall comply with federal noise regulations and shall include environmental noise control devices in proper working order as provided by the manufacturer.

Sound from construction and maintenance activities between 7:00AM and 7:00PM shall not exceed the following limits at any Protected Location:

Duration of Activity	Hourly Sound Level Limited
12 hours	87 dbA
8 hours	90 dbA
6 hours	92 dbA
4 hours	95 dbA
3 hours	97 dbA
2 hours	100 dbA
1 hour or less	105 dbA



Brian Smith



Jeffrey Davis



Jeffery Henderson

Machiasport Selectmen

Attested Copy:



Donna-Jean Metta, Town Clerk

7-15-16
Date

Approved at Annual Town Meeting June 27, 2016