# **Newcastle Wind Energy Ordinance**

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#### 1.0 Title

This Ordinance shall be known as the Newcastle Wind Energy Ordinance.

# 2.0 Authority

This Ordinance is adopted pursuant to the enabling provisions of Article VIII, Part 2, Section 1 of the Maine Constitution; the provisions of 30-A M.R.S. § 3001 (Home Rule), and the provisions of the Planning and Land Use Regulation Act, 30-A M.R.S. § 4312, *et seq*.

# 3.0 Purpose

The purpose of the Ordinance is to provide for the construction and operation of Wind Energy Facilities in Newcastle, subject to reasonable conditions that will protect the public health, safety, and welfare.

#### 4.0 Definitions

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

<u>Approved Residential Subdivision</u> means a residential subdivision for which all applicable land use permits have been issued, provided that the time for beginning construction under such permits has not expired.

<u>Associated Facilities</u> means 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, Generator Lead Lines and substations.

<u>DEP Certification</u> means a certification issued by the Department of Environmental Protection pursuant to 35-A M.R.S. § 3456 for a Wind Energy Development.

<u>Generating Facilities</u> means Wind Turbines and electrical lines, not including Generator Lead Lines, that are immediately associated with the Wind Turbines.

Generator Lead Line means a "generator interconnection transmission facility" as defined by 35-A M.R.S. § 3132 (1-B).

<u>Historic Area</u> means an Historic Site administered by the Bureau of Parks and Recreation of the Maine Department of Conservation.

<u>Historic Site</u> means any site, structure, district or archaeological site which has been officially included on the National Register of Historic Places and/or on the Maine Historic Resource Inventory, or which is established by qualified testimony as being of historic significance.

<u>Locally-Designated Passive Recreation Area</u> means any site or area 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 public easement;
- c. is identified and described in a local comprehensive plan and, d) has been identified and designated at least nine months prior to the submission of the Applicant's Wind Energy Facility permit application.

<u>Meteorological Tower (MET Tower)</u> means a Tower used for the measurement and collection of wind data that supports various types of equipment, including but not limited to anemometers, data recorders, and solar power panels. MET Towers may also include wildlife related equipment such as ANABAT detectors, bird diverts and wildlife entanglement protectors.

<u>Nacelle</u> means the frame and housing at the top of the Tower that encloses the gearbox and generator.

Non-Participating Landowner means any landowner, other than a Participating Landowner whose land is located within Newcastle.

Occupied Building means a residence, school, hospital, house of worship, public library or other building that is occupied or in use as a primary residence or is customarily frequented by the public at the time when the permit application is submitted.

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

<u>Person</u> means an individual, corporation, partnership, firm, organization or other legal entity.

<u>Planned Residence</u> means a Residence for which all applicable building and land use permits have been issued, provided that the time for beginning construction under such permits has not expired.

# <u>Protected Location</u> 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, or an approved residential subdivision, house of worship, academic school, college, library, duly licensed hospital or nursing home near the development site at the time an application for a Wind Energy Facility is submitted under this Ordinance;
- 2) within a nature preserve owned by a land trust, the Maine Audubon Society or the Maine chapter of the Nature Conservancy, a federally designated wilderness area, a state wilderness area designated by statute, a municipal park 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, or;
- 3) a hotel, motel, campsite or duly licensed campground that the Planning Board has designated a Protected Location after making a determination that the health and welfare of the guests or the economic viability of the establishment will be unreasonably impacted by noise in excess of that allowed under section 13.

<u>Residence</u> means a building or structure, including manufactured housing, maintained for permanent or seasonal residential occupancy providing living, cooking and sleeping facilities and having permanent indoor or outdoor sanitary facilities, excluding recreational vehicles, tents and watercraft.

<u>Scenic Resource</u> means either a Scenic Resource of state or national significance, as defined in 35-A M.R.S § 3451(9) or a scenic resource of local significance located within the municipality and identified as such in a comprehensive plan, open space plan or scenic inventory adopted by the municipal legislative body.

<u>Shadow Flicker</u> means alternating changes in light intensity caused by the movement of Wind Turbine blades casting shadows on the ground or a stationary object.

Short Duration Repetitive Sounds means a sequence of repetitive sounds which occur more than once within an hour, each clearly discernible as an event and causing an increase in the sound level of at least 5 dBA on the fast meter response above the sound level observed immediately before and after the event, each typically less than ten

seconds in duration, and which are inherent to the process or operation of the development and are foreseeable.

<u>Sight Line Representation</u> means a profile drawing showing prominent features, including but not limited to topography, buildings, and trees, along and in relation to a line of sight extending from an observer's eye to the lowest point visible on a proposed Tower.

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

<u>Substantial Start</u> means that construction shall be considered to be substantially commenced when any 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 a Tower on a foundation has begun.

<u>Tower</u> means the free-standing structure on which a wind measuring or energy conversion system is mounted.

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

<u>Wind Energy Facility</u> 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 Energy Facility, Type 1A means a Wind Energy Facility having a maximum generating capacity of less than 50kW, a maximum of one Wind Turbine and a maximum Turbine Height of 50 feet.

<u>Wind Energy Facility, Type 1B</u> means a Wind Energy Facility having a maximum generating capacity of less than 100kW and either more than one Wind Turbine, or one or more Wind Turbines with a Turbine Height greater than fifty feet but not greater than 150 feet.

<u>Wind Turbine</u> means a system for the conversion of wind energy into electricity which is comprised of a Tower, generator, Nacelle, rotor and transformer.

# 5.0 Applicability

5.1 This Ordinance applies to any Wind Energy Facility proposed for construction in Newcastle after the effective date of this Ordinance. This Ordinance does not apply to Associated Facilities unless the Generating Facilities are located within Newcastle, in which case this Ordinance applies to both the Generating Facilities and the Associated Facilities.

## **6.0 Conflict and Severability**

- 6.1 If there is a conflict between provisions in this Ordinance, the more stringent shall apply. If there is a conflict between a provision in this Ordinance and that of another Newcastle ordinance, the provision of this Ordinance shall apply.
- 6.2 The invalidity of any part of this Ordinance shall not invalidate any other part of this ordinance

#### 7.0 Effective Date

This Ordinance becomes effective upon passage by the Inhabitants of Newcastle during a Town Meeting.

# 8.0 Classification of Wind Energy Facilities

All Wind Energy Facilities shall be classified in accordance with Table 1 below:

Table 1: Classification of Wind Energy Facilities and

## **Corresponding Local Review and Approval Authority**

Facility	Aggregate	Turbine Height	Max Number	<b>DEP Site Location</b>	Local Review
Type	Capcity		of Turbines	Permit Required	and Approval
1A	0kW to 50 kW	0' - 50'	1	No	Codes
					Enforcement
					Officer
1B	0kW to 100kW	50'- 150'	5	No	Newcastle
					Planning Board

## 9.0 Administration

9.1 Review and Approval Authority

- 1. The Code Enforcement Officer is authorized to review all applications for Type 1A Wind Energy Facilities and MET Towers pursuant to section 11.0, and may approve, deny, or approve with conditions such applications in accordance with the standards of the Ordinance.
- 2. The Newcastle Planning Board is authorized to review all applications for Type 1B Wind Energy Facilities and may approve, deny, or approve with conditions such applications in accordance with this Ordinance.

# 9.2 Permit Required

- 1. No Wind Energy Facility shall be constructed or located within Newcastle without a permit issued in accordance with this Ordinance.
- 2. Each Wind Energy Facility permit shall be valid for ten years upon which time it shall expire. Prior to the expiration, but not more than 90 days prior to permit expiration, a land owner may seek a new permit. There is no limit to the number of successive permits a wind energy facility may seek.
- 3. Any physical modification to an existing Wind Energy Facility shall require a permit modification under this Ordinance. Like-kind replacements and routine maintenance and repairs shall not require a permit modification within the permit term.

# 9.3 Permit Applications

- 1. Application components. A Wind Energy Facility permit application shall consist of the application form, application fee, and supporting documents, as described below:
  - a. Application Forms. The municipality shall provide the application form which shall be signed by: 1) a Person with right, title and interest in the subject property or; 2) a Person having written authorization from a Person with right, title and interest in the subject property. The signature shall be dated and the signatory shall certify that the information in the application is complete and correct and that the proposed facility will be constructed and operated in accordance with the standards of this ordinance and all approval and permit conditions, if any.

- Application Fees. Application fees shall be assessed and paid upon submission of the application in accordance with fees set by the Selectmen of Newcastle.
- c. Supporting Documents. The application shall include all additional documents necessary to satisfy the applicable submission requirements under section 10 of this Ordinance.
- 2. Application Submission. The Applicant shall submit its application for a Wind Energy Facility permit to the Codes Enforcement Officer who shall note on the application the date on which it was received.
- 3. Changes to a Pending Application
  - a. The Applicant shall promptly notify the municipal entity responsible for review and approval of a pending application under section 9.1 of any changes the Applicant proposes to make to information contained in the application.
  - b. If changes are proposed to a pending application after a public hearing has been held, the Newcastle Planning Board may consider those changes and continue with the review and approval process without a renewed public hearing if it determines that the changes do not materially alter the application. If the Newcastle Planning Board determines that the proposed changes do materially alter the application it shall schedule and conduct another public hearing within 30 days of that determination. In making its determination, the Newcastle Planning Board shall consider whether the proposed changes involve potential adverse effects different than or in addition to those addressed in the initial application.

## 9.4 Permit Application Procedures

- 1. Type 1A Wind Energy Facility Application
  - a. Within fifteen business days after receiving an application, the Codes Enforcement Officer shall notify the Applicant in writing either that the application is complete or, if the application is incomplete, the specific additional material needed to complete the application. The Codes Enforcement Officer may waive any submission requirement if the Codes Enforcement Officer issues a written finding that, due to special

- circumstances of the application, adherence to that requirement is not necessary to determine compliance with the standards of this Ordinance.
- b. Within 30 days after determining the application to be complete, the Codes Enforcement Officer shall issue a written order: 1) denying approval of the proposed Wind Energy Facility, 2) granting approval of the proposed Wind Energy Facility or, 3) granting approval of the proposed Wind Energy Facility with conditions. In making the decision, the Codes Enforcement Officer shall make findings on whether the proposed Wind Energy Facility meets the applicable criteria described in sections 12 and 13.
- c. With the agreement of the applicant, the Codes Enforcement Officer may extend the procedural time frames of this section.

## 2. Type 1B Wind Energy Facility Applications

- a. The Applicant is strongly encouraged to meet with the Codes Enforcement Officer before submitting an application. At this pre-application meeting, the Codes Enforcement Officer will explain the Ordinance's provisions, application forms, and submission requirements. The Applicant should provide photos of the proposed site and written descriptions of the proposed facility and the proposed site, including its location and lot area.
- b. An application shall be eligible for consideration at a regularly-scheduled meeting of the Newcastle Planning Board only if the applicant submits it at least 14 days prior to the meeting and provides the application fee at the time of submission.
- c. Within 30 days after receipt of the application by the Codes Enforcement Officer, the Newcastle Planning Board shall notify the Applicant in writing either that the application is complete or, if the application is incomplete, the specific additional material needed to complete the application. The Newcastle Planning Board may waive any submission requirement if it issues a written finding that, due to special circumstances of the application, adherence to that requirement is not necessary to determine compliance with the standards of this Ordinance.
- d. The Newcastle Planning Board may decide to hold a public hearing for a Type 1B Wind Energy Facility application. If it decides to hold a public hearing for a Type 1B application, the Newcastle Planning Board shall

hold that hearing within 90 days after determining that application is complete.

- e. Within 90 days after determining that an application for a Type 1B Wind Energy Facility is complete the Newcastle Planning Board shall issue a written order: 1) denying approval of the proposed Wind Energy Facility, 2) granting approval of the proposed Wind Energy Facility or, 3) granting approval of the proposed Wind Energy Facility with conditions. In making its decision, the Newcastle Planning Board shall make findings on whether the proposed Wind Energy Facility meets the applicable criteria described in sections 12, 13, and 14.
- f. With the agreement of the applicant, the Newcastle Planning Board may extend the procedural time frames of this section.

Table 2: Procedural Time Frames

Facility Type	Application	Public Hearing	Final Decision
	Completeness		
1A	≤10 days	NA	Within 30 days
1B	≤30 days	<30 days	Within 90 days

# 9.5 Notice of Meetings

Ten days prior to any meeting at which an application for a Type 1B Wind Energy Facility is to be considered, the Town of Newcastle shall send notice by first class mail, to the applicant and all owners of property to all property owners within 1,000 feet of the property lines of the property on which the Wind Energy Facility is proposed to be located. The notice shall state the date, time and place of the meeting and the proposed location and the classification of the proposed Wind Energy Facility.

# 9.6 Public Hearings

The Newcastle Planning Board shall have notice of the date, time, and place of any public hearing and the proposed location and the classification of the proposed Wind Energy Facility:

- 1. Published at least once in a newspaper having general circulation within the municipality. The date of the first publication shall be at least 10 days before the hearing.
- 2. Mailed by first class mail to the Applicant and to owners of property within 500 feet of the property on which the Wind Energy Facility is proposed to be located, at least 10 days before the public hearing. The Newcastle Planning Board shall maintain a list of property owners to whom notice is mailed in the application file. Failure of any of these property owners to receive a notice shall not invalidate the public hearing, nor shall it require the Newcastle Planning Board to schedule another hearing.

#### 9.7 Professional Services

In reviewing the application for compliance with this Ordinance, the Newcastle Planning Board may retain professional services, including but not limited to those of an attorney or consultant, to verify information presented by the Applicant. The Planning Board shall order the Applicant to escrow funds with the Town of Newcastle sufficient to cover professional fees for professional, technical, and expert fees. All moneys not used to pay experts shall be returned to the applicant.

# 9.8 Expiration of Permits

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 unless construction of the Wind Energy Facility has been completed. Upon the Applicant's written request, the municipal entity responsible for review and approval of the application under section 9.1 may extend either or both expiration time limits by one year.

#### 9.9 Access

The Codes Enforcement Officer shall have access to the site at all times to review the progress of the work and shall have the authority to review all records and documents directly related to the design, construction and operation of the facility.

#### 9.10 Enforcement

- 1. It shall be unlawful for any Person to violate or fail to comply with or take any action that is contrary to the terms of the Ordinance, or to violate or fail to comply with any permit issued under the Ordinance, or to cause another to violate or fail to comply or take any action which is contrary to the terms of the Ordinance or any permit under the Ordinance.
- 2. If the Code Enforcement Officer or other Person charged with enforcement of municipal laws determines that a violation of the Ordinance or the permit has occurred, the Codes Enforcement Officer shall provide written notice to any Person alleged to be in violation of this Ordinance or permit. If the alleged violation does not pose an immediate threat to public health or safety, the Codes Enforcement Officer and the alleged violator shall engage in good faith negotiations to resolve the alleged violation. Such negotiations shall be conducted within thirty (30) days of the notice of violation and, with the consent of the alleged violator, may be extended.
- 3. If, after thirty (30) days from the date of notice of violation or further period as agreed to by the alleged violator, the Codes Enforcement Officer determines, in the officer's reasonable discretion, that the parties have not resolved the alleged violation, the Codes Enforcement Officer may institute civil enforcement proceedings or any other remedy at law to ensure compliance with the Ordinance or permit.

## 9.11 Appeals

Any Person aggrieved by a decision of the Codes Enforcement Officer or the Newcastle Planning Board under this Ordinance may appeal the decision to the Board of Appeals, as provided by Chapter XIV of the Newcastle Land Use Ordinance.

## 10.0 Application Submission Requirements

# **10.1** General Submission Requirements

- 1. A completed application form including:
  - a. The Applicant and Participating Landowner(s') name(s) and contact information.
  - b. The address, tax map number, zone and owner(s) of the proposed facility site and any contiguous parcels owned by Participating Landowners.

- c. The tax map number, zone, current use, owner(s) and addresses of owner(s) of parcels that abut the proposed facility site or abut parcels of Participating Landowners that are contiguous with the proposed facility site (Not required for Type 1A applications)
- d. An affirmation, signed and dated by the Applicant, that the information provided in the application is correct and that the proposed Wind Energy Facility, if approved and built, shall be constructed and operated in accordance with the standards of this ordinance and all conditions of approval, if any
- e. All participating landowners shall sign an affidavit binding the landowner, any contractors, and successors in interest of the facility stating the sound level at the applicable property lines. Where the actual sound level, after construction, exceeds the limits stated in the affidavit, the landowner and all successors in interest shall be liable for a violation of this ordinance and shall be subject to a land use violation and may be required to remove or modify the facility and be subject to the penalties described in 30-A § 4452 or any successor law.
- 2. Receipt showing payment of application fee.
- 3. A copy of a deed, easement, purchase option or other comparable documentation demonstrating that the Applicant has right, title or interest in the proposed facility site.
- 4. Location map showing the boundaries of the proposed facility site and all contiguous property under total or partial control of the Applicant or Participating Landowner(s) and any Scenic Resource or Historic Site within 2500 feet of the proposed development.
- 5. Description of the proposed Wind Energy Facility that includes the number and aggregate generating capacity of all Wind Turbines, the Turbine Height and manufacturer's specifications for each Wind Turbine (including but not limited to the make, model, maximum generating capacity, sound emission levels and types of overspeed controls) and a description of Associated Facilities.
- 6. Site plan showing the proposed location of each Wind Turbine and Associated Facilities and any of the following features located within 500 feet of any Wind Turbine: parcel boundaries, required setbacks, topographic contour lines (maximum 20-foot interval), roads, rights-of-way, overhead utility lines,

buildings (identified by use), land cover, wetlands, streams, water bodies and areas proposed to be re-graded or cleared of vegetation.

- a. In addition to the information in 6, above, site plans for Type 1B Wind Energy Facilities shall show the location and average height of tree cover to be retained and the location, variety, planting height and mature height of proposed trees, if any.
- 7. Written evidence that the Environmental Coordinator of the Maine Department of Inland Fisheries and Wildlife (MDIFW) and that the Maine Natural Areas Program (MNAP) have both been notified of the pending application and the location and Turbine Height of all proposed Wind Turbines.
- 8. Written evidence that the provider of electrical service to the property has been notified of the intent to connect an electric generator to the electricity grid, if such connection is proposed.
- 9. Description of emergency and normal shutdown procedures.
- 10. Photographs of existing conditions at the site.
- An application for a Type 1A or 1B Wind Energy Facility shall include structural drawings of the Tower foundation and anchoring system: a) prepared by the Wind Turbine or Tower manufacturer, b) prepared in accordance with the manufacturer's specifications or, c) prepared and stamped by a Maine-licensed professional engineer.
- 12. An application for a Type 1A or Type 1B Wind Energy Facility shall include:
  - a written statement, signed by the Applicant, that certifies that the proposed facility is designed to meet the applicable noise control standards under section 13.1.3 and acknowledges the Applicant's obligation to take remedial action in accordance with section 13.1.6 if the Codes Enforcement Officer determines those standards are not being met or;
- 13. An Application for Type 1B Wind Energy Facility shall include the following site line, photographic and, if applicable, screening information:
  - a. Sight Line Representations of each Wind Turbine from the nearest Occupied Building and from at least one other representative location within 500 feet of the Wind Turbine, such as a Scenic Resource or another Occupied Building. Each Site Line Representation shall be drawn at a scale sufficiently large to make it legible. If screening is proposed, the

proposed screening device, such as trees, shrubs or fencing, shall be depicted on the drawing along with the sight line as altered by the screening.

- b. A current four-inch by six-inch color photograph of the proposed site of the Wind Turbine(s) taken from viewpoints corresponding to each of the Site Line Representations.
- c. One copy of each of the photographs described in b, above, onto which is superimposed an accurately-scaled and sited representation of the Wind Turbine(s).

# 11.0 Meteorological Towers (MET Towers)

Applications for Meteorological (MET) Towers shall be subject to the submission and review standards for a Type 1A Wind Energy Facility, as applicable, except that no height limitation shall apply. A permit for a MET Tower shall be valid for 2 years and 2 months from the date of issuance. The Codes Enforcement Officer may grant one or more one-year extensions of this permit period. Within 30 days following removal of a MET Tower, the Applicant shall restore the site to its original condition to the extent practicable. The provisions of this section do not apply to permanent MET Towers included as Associated Facilities in approved Wind Energy Facility applications.

#### 12.0 General Standards

## **12.1** Safety Setbacks

Wind Turbines shall be set back a horizontal distance equivalent to 200% of the Turbine Height from property boundaries, public and private rights-of-way and overhead utility lines that are not part of the proposed Generating Facility except that the entity responsible for review and approval of the application may allow a reduced setback if the Applicant submits, in writing: 1) a waiver of the property boundary setback signed by the pertinent abutting landowner or; 2) evidence, such as operating protocols, safety programs, or recommendations from the manufacturer or a licensed professional engineer with appropriate expertise and experience with Wind Turbines, that demonstrates that the reduced setback proposed by the Applicant is appropriate.

#### **12.2** Natural Resource Protection

A Wind Energy Facility shall not have an unreasonable adverse effect on rare, threatened, or endangered wildlife, significant wildlife habitat, rare, threatened or endangered plants and rare and exemplary plant communities. In making its determination under this subsection, the municipal entity responsible for review and approval of the permit application under section 9.1 shall consider pertinent

application materials and the written comments and/or recommendations, if any, of the Maine Department of Inland Fisheries and Wildlife (MDIFW) Environmental Coordinator and the Maine Natural Areas Program (MNAP).

## 12.3 Building Permit

All components of the Wind Energy Facility shall comform to relevant and applicable local and state building codes.

# 12.4 Overspeed Controls and Brakes

Each Wind Turbine shall be equipped with an overspeed control system that: 1) includes both an aerodynamic control such as stall regulation, variable blade pitch, or other similar system, and a mechanical brake that operates in fail safe mode; or 2) has been designed by the manufacturer or a licensed civil engineer and found by the municipal entity responsible for review and approval of the application under 9.1, based on its review of a written description of the design and function of the system, to meet the needs of public safety.

# 12.5 Electrical Components and Interconnections

All electrical components of the Wind Energy Facility shall conform to relevant and applicable local, state, and national codes.

#### 12.6 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 ground surface.

#### 12.7 Blade Clearance

The minimum distance between the ground and all blades of a Wind Turbine shall be 25 feet as measured at the lowest arc of the blades.

## 12.8 Signal Interference

The Applicant shall make reasonable efforts to avoid and mitigate to the extent practicable any disruption or loss of radio, telephone, television, or similar signals caused by the Wind Energy Facility.

# 12.9 Structure Type

With the exception of Meteorological (MET) Towers, Towers shall be monopoles with no guy wires. This requirement may be waived if the Applicant demonstrates to

the satisfaction of the municipal entity responsible for review and approval of the permit application under section 9.1, that there is no practicable alternative. Bird flight diverters must be installed on any guy wires that are permitted.

#### 12.10 Erosion Control

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

# 12.11 Building-Mounted Wind Turbines

Building-mounted Wind Turbines are not permitted.

#### 12.12 Visual Appearance

- 1. A Wind Turbine shall be a non-obtrusive color such as white, off-white or gray, or as may otherwise be required by another governmental agency with jurisdiction over the Wind Energy Facility.
- 2. A Wind Turbine shall not be lighted artificially, except to the extent consistent with Federal Aviation Administration recommendations or other applicable authority that regulates air safety or as is otherwise required by another governmental agency with jurisdiction over the Wind Energy Facility.
- 3. A Wind Turbine shall not be used to support signs and shall not display advertising except for reasonable and incidental identification of the turbine manufacturer, facility owner and operator, and for warnings.

## 12.13 Visibility of Wind Turbine

The following requirements apply, to the extent practicable, to Type 1B Wind Energy Facilities:

- 1. To the extent that doing so does not inhibit adequate access to the wind resource, each Wind Turbine shall be located to maximize the effectiveness of existing vegetation, structures and topographic features in screening views of the Wind Turbine from Occupied Buildings and Scenic Resources.
- 2. When existing features do not screen views of a Wind Turbine from Residences and Scenic Resources, screening may be required, where feasible and effective, through the planting of trees and/or shrubs. In order to maximize the screening effect and minimize wind turbulence near the Wind Turbine, plantings should be situated as near as possible to the point from

which the Wind Turbine is being viewed. Such plantings should be of native varieties.

## 13.0 Special Standards for Type 1A and Type 1B Wind Energy Facilities

- 13.1 Noise emanating from a Wind Energy Facility shall be controlled in accordance with the provisions of this section.
  - 1. The sound level shall be measured at the lot line of the Participating Land-Owner's outermost parcel lot line or at any location on another property requested by a complaining resident or lot owner provided that the sound can be identified as being generated by the Wind Energy Facility.
  - 2. The sound level limits contained in this section do not apply to the facility site or any parcel(s) owned by a Participating Land-Owner that are contiguous with the facility site.
  - 3. The sound levels resulting from routine operation of a Wind Energy Facility, as measured in accordance with the procedures described in section 13.1.5 shall not exceed the limits specified for the following locations and times:

25 dBA between 7:00 p.m. and 7:00 a.m.

35 dBa between 7:00 a.m. and 7:00 p.m.

- 4. If the Applicant submits the certification and acknowledgement required by Section 10.1.12, the municipal entity responsible for review and approval of the application under Section 9.1 shall determine, for purposes of issuing its approval, that the pertinent sound-level limits under section 13 have been met, subject to the Applicant's obligation to take remedial action as necessary under section 13.1.5.
- 5. The Codes Enforcement Office may perform measurements of sound levels resulting from routine operation of an installed Type 1A or Type 1B Wind Energy Facility at the officer's own initiative or in response to a noise-related complaint to determine compliance with the pertinent standards in section 13. Such measurements shall be performed as follows:
  - Measurements shall be obtained during representative weather conditions
    when the sound of the Wind Energy Facility is most clearly noticeable.
     Preferable weather conditions for sound measurements at distances greater
    than about 500 feet from the sound source include overcast days when the

- measurement location is downwind of the Wind Turbine and inversion periods (which most commonly occur at night).
- b. Sound levels shall be measured at least four (4) feet above the ground by a meter set on the A-weighted response scale, fast response. The meter shall meet the latest version of American National Standards Institute (ANSI S1.4.) "American Standard Specification for General Purpose Sound Level Meters" and shall have been calibrated at a recognized laboratory within the past year.
- c. 5 dBA shall be added to sound levels of any Short Duration Repetitive Sound measured in accordance with paragraphs a and b.
- 6. The Applicant shall operate the proposed Wind Energy Facility in conformance with the sound level limits of section 13.1. If, based on post-installation measurements taken in accordance with section 13.1.3 the Codes Enforcement Officer determines that the applicable sound-level limits are not being met, the Applicant shall, at the Applicant's expense and in accordance with the Newcastle Wind Energy Facility Ordinance and in consultation with the Codes Enforcement Officer, take remedial action deemed necessary by the Codes Enforcement Officer to ensure compliance with those limits. Remedial action that the Codes Enforcement Officer may require, includes, but shall not be limited to, one or more of the following:
  - a. modification or limitation of operations during certain hours or wind conditions;
  - b. maintenance, repair, modification or replacement of equipment;
  - c. relocation of the Wind Turbine(s); and,
  - d. removal of the Wind Turbine(s) provided that the Codes Enforcement Officer may require removal of the Wind Turbine(s) only if the Codes Enforcement Officer determines that there is no practicable alternative.
  - e. institute proceedings for a nuisance and for violation of an ordinance and subject the landowner to all penalties described under 30-A MRSA § 4452.

#### 13.2 Discontinued Use

1. A Type 1A or Type 1B Wind Energy Facility that is not generating electricity for twelve (12) consecutive months shall be deemed a discontinued use and

shall be removed from the property by the Applicant within 120 days of receipt of notice from the Codes Enforcement Officer, unless the Applicant provides information that the Newcastle Planning Board deems sufficient to demonstrate that the project has not been discontinued and should not be removed. If the Wind Energy Facility is not removed within this time period, the municipality may remove the turbine at the Applicant's expense. The Applicant shall pay all site reclamation costs deemed necessary and reasonable to return the site to its pre-construction condition, including the removal of roads and reestablishment of vegetation. The municipality shall assess a special tax against the any property owned by a Participating Land Owner or owned by any corporation or subsidiary owned by the Participating land owner.

2. If a surety has been given to the municipality for removal of a Type 1B Wind Energy Facility, the Applicant may apply to the Newcastle Planning Board for release of the surety when the Wind Energy Facility has been removed to the satisfaction of the Codes Enforcement Officer.