

APPROVED BY REFERENDUM VOTE ON TUESDAY, NOVEMBER 8, 2011

WIND ENERGY SYSTEMS ORDINANCE
TOWN OF BROOKSVILLE

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1	Title	1
2	Authority	1
3	Purpose	1
4	Review and Approval Authority	1
5	Application Process and Procedure	2
	Pre-Application Conference	
	Application Submission Requirements	
	Application Procedure for Planning Board Approval	
	Planning Board Decision	
6	Submission Waiver	5
7	Fees	5
8	Amendment to an Approved Application	5
9	Approval Standards	6
10	Abandoned or Uncompleted Facilities	7
11	Appeals	8
12	Enforcement	8
13	Penalties	9
14	Conflict and Severability	9
15	Effective Date	9
16	Definitions	9

WIND ENERGY SYSTEMS ORDINANCE

TOWN OF BROOKSVILLE

Section 1: TITLE

This Ordinance shall be known as the "Wind Energy Systems Ordinance" of Brooksville, Maine (hereinafter referred to as the "ordinance").

Section 2: AUTHORITY

This Ordinance is adopted pursuant to the enabling provisions of Article VIII, Part 2, §1 of the Maine Constitution (Municipal Home Rule), the provisions of 30-A MRSA §3001 (Home Rule), and the provisions of the Planning and Land Use Regulation Act, 30-A MRSA §4312, etc. seq. (*Comprehensive Planning and Regulation, or "Growth Management Act"*) and 30-A MRSA §4452 ("Enforcement of Land Use Laws and Ordinances").

Section 3: PURPOSE

The purpose of this ordinance is to enable the responsible utilization of wind power, while ensuring personal and public health and safety, protecting the environment, preserving private property rights, and protecting the value of property in the vicinity of wind power installations.

To accomplish this purpose, the ordinance requires those who wish to install a wind energy facility to meet certain application requirements, which are detailed in Section 5 below. In summary, there are two processes: one for applicants wishing to construct a facility with a generator capacity greater than 3kW who must meet all of these requirements, and one for applicants seeking to install a system with a generator capacity of 3kW or less who may follow a streamlined process. In both cases, waivers for all requirements except maximum output power, maximum height, minimum setback, and maximum noise level may be requested.

Section 4: REVIEW AND APPROVAL AUTHORITY

4.1 No new wind energy system and no alteration, expansion or reconstruction of an existing wind energy system, for either residential or commercial use, shall be constructed without the owner or operator first obtaining a permit from the CEO and/or the Planning Board pursuant to this ordinance.

4.1.1 Approval by the CEO is required for construction of a new wind energy facility, and for expansion or reconstruction of an existing facility, with an output power less than 3kW.

4.1.2 Approval by the Planning Board is required for construction of a new wind energy facility, and for expansion or reconstruction of an existing facility, with an output power of 3kW or more to the maximum allowed of 50kW.

4.2 All approvals shall expire within one (1) year of the date of issuance unless work there under is substantially completed. If work is not substantially completed within one (1) year, a new application must be made.

Section 5: APPLICATION PROCESS AND PROCEDURE

5.1 Pre-Application Conference

All persons seeking approval of the CEO and/or the Planning Board under this ordinance shall meet with the CEO no less than thirty (30) days before filing an application. At this meeting the CEO shall explain to the applicant the ordinance provisions as well as the application forms and submissions that will be required under this ordinance and discuss whether any of the requirements may be waived (see Section 6).

5.2 Application Submission Requirements

All persons seeking approval of the CEO or the Planning Board under this ordinance shall submit an application which includes the following information:

5.2.1 Documentation of the applicant's right, title or interest in the property on which the facility is to be sited, including the name and address of the property owner and the applicant.

5.2.2 List of names, addresses, tax map with location of proposed tower marked, and lot number of all property owners abutting the applicant's property.

5.2.3 A USGS quadrangle map, sized to 8½"x 11", of the property on which the wind energy system is proposed, with the general area cross-hatched or otherwise demarcated.

5.2.4 A project description, which includes specific information on the type, size, tower type and height, rotor material and diameter, the rated power output, performance, safety and noise, and the manufacturer and model number of the wind energy system.

5.2.5 A site plan of the subject property showing the planned location of the wind energy system as well as the location of and distance in feet to:

- (a) setback line
- (b) adjacent property lines
- (c) all roads and driveways
- (d) easements
- (e) rights of way

- (f) habitable structures
- (g) utility lines
- (h) great ponds, streams and all wetlands
- (i) proposed access roads
- (j) significant wildlife habitat (as defined in Title 38 MRSA Sec. 480B(10))
- (k) erosion control (as outlined in the Maine Erosion and Sediment Control Law, Title 38 MRSA Sec. 420-C)
- (l) all other structures

5.2.6 Documentation of the pre-construction ambient low-level sound (dbC) measurements at the wind energy system owner's property boundaries performed by a properly credentialed professional at the applicant's expense. This requirement may not be waived for a wind energy system greater than 3kW.

5.2.7 If a connection to the publicly regulated utility grid is proposed, a copy of the contract between applicant and utility verifying that the proposed connection is acceptable, and/or other evidence making clear that the utility is aware of the proposed connection and finds it acceptable.

5.2.8 For a wind energy facility with a generator capacity of 10kW to 50kW, a sample form of a surety (bond), to be approved by the Planning Board, in an amount sufficient to cover the costs of site improvements and the costs of removal should the facility be abandoned or uncompleted in accordance with Section 10. That bond shall specify that the municipality shall be notified by the bonding agent of any cancellation or reduction of the surety. The Planning Board shall specify how much of the surety is allocated to completion of the facility and how much to removal of an abandoned or uncompleted facility. It is a condition of approval that a certified copy of the actual surety-bond be filed with the Town within forty-five (45) days of approval.

5.2.9 For a wind energy facility planned with community participation, the applicant must demonstrate that substantial community benefits will accrue to the town as a result of the construction and operation of the facility. In addition to any other demonstration of community benefits, including significant tangible benefits provided for in a community benefits agreement entered into by the applicant and the town, the applicant must identify the tax value, direct payments or other financial benefits to be realized and the form and duration of such benefits, the short-term and long-term jobs to be created, and the telecommunication infrastructure enhancements or other economic benefits to be realized and the duration of such benefits.

5.2.10 The Planning Board may require scenic information for a wind energy system consisting of one or more of the following:

- (a) A visual analysis composed of elevation drawings of the proposed wind energy system and any other proposed structures, showing height above ground level. The analysis shall also indicate the color

treatment of the system's components and any visual screening incorporated into the site that is intended to lessen the system's visual prominence.

(b) A landscaping plan indicating the proposed placement of the facility on the site; location of existing trees and other significant site features; and the method of fencing, if any.

(c) A narrative discussing the extent to which the wind energy system would be visible from a designated scenic resource, the tree line elevation of vegetation within two thousand (2,000) feet and the distance to the proposed facility from the designated scenic resource's noted viewpoints as identified in the Brooksville Comprehensive Plan or other ordinances.

(d) A graphic mock-up of the proposed system from the four directions: North, South, East, West.

5.3 Application Procedure for Planning Board Approval

5.3.1 Seven (7) copies of the application shall be filed with the CEO at least two (2) weeks prior to the scheduled Planning Board meeting for review. The application shall be accompanied by the permit application fee (Section 7.1). Within forty-five (45) days of the filing of an application, the Planning Board shall review the application and determine if the application meets the submission requirements. The CEO and the Planning Board shall review any requests for a waiver from the submission requirements submitted pursuant to Section 6 and shall act on these requests prior to determining the completeness of the application.

5.3.2 If the application is complete, the CEO shall notify the applicant in writing of this determination. If the application is incomplete, the CEO shall notify the applicant in writing, specifying the additional materials or information required to complete the application.

5.3.3 The Planning Board shall hold a public hearing within thirty (30) days of the date on the notice from the CEO to the applicant that the application was deemed complete. The Planning Board shall publish the time, date and place of the hearing at least one (1) time at least seven (7) days prior to the hearing in a newspaper of area-wide circulation. Abutting property owners shall be notified by registered mail by the Town of the hearing. Failure on the part of any abutter to receive such notice shall not be grounds for delay of any consideration of the application nor denial of the project.

5.4 Planning Board Decision

Within thirty (30) days of the public hearing, or within another time limit as may be otherwise mutually agreed upon by the Planning Board and the applicant, the Board

shall approve, approve with conditions or deny the application in writing, together with the findings on which that decision is based.

Section 6: SUBMISSION WAIVER

The CEO and/or the Planning Board may waive any of the submission requirements in Section 5 based upon a written request of the applicant submitted at the time of application. A waiver of any submission requirement may be granted only if the CEO and/or the Planning Board find in writing that due to special circumstances of the application the information is not required to determine compliance with the standards of this ordinance.

Section 7: FEES

7.1 Application Fee. An application for CEO and/or for Planning Board approval shall include payment of an application fee of one hundred dollars (\$100) for a wind energy system under 3kW and two hundred fifty dollars (\$250) for a wind energy system 3kW up to 50kW. The application shall not be considered complete until this fee is paid.

7.2 Site Visit Fee. The application fee covers two site visits by the CEO. In the event that additional visits are required to ensure compliance with the application and construction process, there will be a charge of seventy-five dollars (\$75) per visit payable within fifteen (15) days of the visit.

7.3 Planning Board Review Fee. In addition to the application fee required under Section 7.1 above, the Planning Board may require an applicant to deposit, in advance, with the Town Treasurer, a sum determined by the Planning Board to be sufficient to reimburse all outside costs to be incurred by the Planning Board in its review of the application. Such costs may include, but are not limited to, costs of professional surveying, engineering and legal assistance as needed by the Planning Board pursuant to their review of the application. The purpose of such outside services shall be to provide independent technical advice to the Planning Board when, in the opinion of the Planning Board, the public interest or issues raised by the application may require it. In the event the Planning Board's actual outside review costs exceed the initial cost estimate, the Planning Board will require the applicant to deposit additional funds with the Town Treasurer. All funds shall be deposited in a non-interest bearing escrow account and any portion not used shall be returned to the applicant within thirty (30) days of the Planning Board's decision.

Section 8: AMENDMENT TO AN APPROVED APPLICATION

Any changes to an approved application must be approved by the CEO and/or the Planning Board, in accordance with Section 4. If there is a transfer of ownership before or during the building phase, the new owner shall meet with the CEO and/or the Planning Board.

Section 9: APPROVAL STANDARDS

An application for approval by the CEO and/or the Planning Board under Section 4 must meet the following standards.

9.1 Output Power. The maximum nameplate capacity of a new wind energy system shall be 50kW. This section is not subject to waiver.

9.2 Height. A new wind energy system shall have a maximum tower height of 100 (one hundred) feet. This section is not subject to waiver.

9.3 Setback. The tower of a new wind energy system shall be set back from all adjoining property lines, roads, easements and rights-of-way, except the wind energy systems direct access road, a minimum distance equal to one and one-half (1½) times the maximum height of the tower and blade height (when blades at the highest point in their arc) as measured from the ground. This section is not subject to waiver.

9.4 Sound levels

9.4.1 A new wind energy system shall not exceed 35dBA for any continuous five (5) minute period as measured anywhere beyond the property boundaries of the wind energy system's owner/operator or on the adjoining properties, including the adjoining property lines and habitable structures, except during short-term (12 hours or less) weather events, even if mitigation waivers are in effect for these adjoining properties. This section is not subject to waiver.

9.4.2 A new wind energy system shall emit no additional dBC (low level) sounds beyond the property boundaries of the wind energy system's owner/operator at any time. (See Section 5.2.6)

9.5 Design

9.5.1 The guy wires of a tower shall have safety-covered sheeting or rigging cable covers for a minimum of fifteen (15) feet above the ground.

9.5.2 The WES shall be equipped with both manual and automatic over-speed controls.

9.5.3 The WES shall be designed, sited and constructed to prevent the disruption or loss of emergency or private radio, telephone, television, internet connections or similar signals beyond the site. If it is demonstrated that the system is causing interference with such communications, the system operator shall promptly eliminate the interference or cease operation of the system.

9.5.4 The WES shall be designed and installed such that unauthorized public access via step bolts or a ladder is prevented for a minimum of fifteen (15) feet above the ground.

9.5.5 The WES shall have a non-visually reflective surface to minimize any visual disruptions.

9.5.6 All on-site electrical wires associated with the WES shall be installed underground except for 'tie-ins' to any public utility company transmission poles, towers and lines. This standard may be modified if the project terrain is determined to be unsuitable for underground installation.

9.5.7 The WES shall not be lighted unless required by the FAA.

9.5.8 The WES shall not display any permanent or temporary signs, writing, symbols, logos or any graphic representation of any kind except for signs at ground level identifying the turbine manufacturer, the owner/operator, emergency contact information, and appropriate warnings as required by national, state, and local laws.

9.5.9 The WES shall have an automatic braking, governing or feathering system to prevent uncontrolled rotation and a manual service disconnect within reach of the ground.

9.6.10 Shadow flicker shall be limited to the facility property at all times.

9.5.11 The minimum distance between the ground and between a structure's roof and any moving part of a new WES shall be fifteen (15) feet and eight (8) feet, respectively.

Section 10: ABANDONED OR UNCOMPLETED FACILITIES

10.1 Abandoned Facilities. A wind energy system facility which is not generating electricity for a continuous period of twelve (12) months shall be considered abandoned. The CEO shall notify the owner of an abandoned facility in writing and order the removal of the facility within ninety (90) days of receipt of the written notice. The owner of the facility shall have thirty (30) days from the receipt of the notice to demonstrate to the CEO that the facility has not been abandoned. If the owner fails to do so, the owner shall have sixty (60) days to remove the facility. If the facility is not removed within this time period, the municipality may remove the facility at the facility owner's expense, the cost of which shall first come from any surety or bond in favor the municipality under Section 5.2.8.

10.2 Uncompleted Facilities. A wind energy system facility which does not contain all lot improvements and landscaping in accordance required under this ordinance by the time it goes into operation shall be considered uncompleted. The CEO shall notify the owner of the facility in writing and order the completion of said facility within ninety (90) days of receipt of the written notice. If the facility is not completed within this time period, the municipality may undertake all uncompleted lot improvements and landscaping at the owner's expense, the cost of which shall first come from any surety bond in favor of the municipality under Section 5.2.8.

10.3 Release of Surety/Bond. Upon removal of the wind energy system facility or the completion of said facility, as the case may be, the facility owner may apply to

the Planning Board for release of a part or all of the surety bond. The request shall not be unreasonably withheld so long as the facility has been removed or completed to the satisfaction of the Planning Board.

Section 11: APPEALS

Any appeal by any aggrieved party with standing from any decision of the CEO or the Planning Board to approve, approve with conditions or deny any application made under this ordinance, including any enforcement action or inaction alleged under Section 12 of this ordinance, shall be to the Superior Court in accordance with Rule 80(B) of the Maine Rules of Civil Procedure, said appeal to be filed within thirty (30) days of the written decision, action or failure or refusal to take action complained of.

Section 12: ENFORCEMENT

12.1 Any violation of this ordinance shall be deemed to be a nuisance.

12.2 The CEO, as appointed by the Board of Selectmen, shall enforce this ordinance. If the CEO finds that any provision of this ordinance has been violated, the CEO shall notify in writing the person responsible for such violation, indicating the nature of the violation and ordering the action necessary to correct it. The CEO may take any other legal action to ensure compliance with this ordinance.

12.3 Upon complaint of any neighboring resident affected by the wind energy system's sounds, ambient and maximum permitted sound measurements shall be performed by an agent designated by the CEO or the Planning Board. The agent's report shall be submitted to the Planning Board for review. The fee for this service shall be paid by the complainant unless the maximum permitted decibel level has been exceeded, in which case, the Town shall pay the fee. The current owner of the system shall correct the violation and reimburse the Town for the fee for the noise level measurements within thirty (30) days of notice by the CEO. If the maximum decibel reading anywhere on the complainant's property is exceeded, the installation shall be considered a nuisance and must be corrected within ninety (90) days from notification of the violation and, if the violation cannot be corrected, the wind energy system shall be removed or re-located.

12.4 The Board of Selectmen is authorized to enter into administrative consent agreements for the purpose of eliminating violations of this ordinance and recovering fines without court action. Such agreements shall not allow a violation of this ordinance to continue unless there is clear and convincing evidence that the violation occurred as a direct result of erroneous advice given by an authorized municipal official upon which the applicant reasonably relied to its detriment and there is no evidence that the owner acted in bad faith and/or that the removal of the violation will result in a threat to public health and safety or substantial environmental damage.

Section 13: PENALTIES

Any person or company that owns or controls any building or property connected with a wind energy system that violates this ordinance shall be liable for civil penalties in accordance with Title 30-A MRSA §4452. Each day such a violation continues after notification by the CEO shall constitute a separate offense. Each offense shall be subject to civil penalties, orders to correct violations and attorney and expert witness fees in accord with Title 30-A MRSA §4452. (See Section 12.)

Section 14: CONFLICT AND SEVERABILITY

14.1 Conflicts. Whenever a provision of this ordinance conflicts with or is inconsistent with another provision of this ordinance or of any other ordinance, regulation or statute administered by the municipality, the more restrictive provision shall apply.

14.2 Severability. The invalidity of any part of this ordinance shall not invalidate any other part of this ordinance.

Section 15: EFFECTIVE DATE

This ordinance becomes effective immediately upon passage by the Town.

Section 16: DEFINITIONS

Ambient sound: All sound present in a given environment, which is a composite of sounds from many sources, near and far, intermittent and steady, including the wind system facility once it is constructed and operating.

Applicant: The legal entity, including successors and assigns, applying for a permit under this ordinance.

dB (decibel): A measurement of sound level, L. L is defined in decibels (dB) as $L = 20 \log_{10} (P_{rms}/P_0)$ dB, where P_{rms} is the root-mean-square pressure of the sound measured in Pascals (Pa), and P_0 is the reference threshold of human hearing (2×10^{-5} Pa or 20 μ Pa).

dBA: The accepted unit of measurement for environmental sound pressure determinations. When the total sound pressure is integrated over the entire audible spectrum, a weighting factor is used which de-emphasizes both low and high frequencies. The formulas for this correction may be found in ANSI standard publications, and such corrections are built into most instruments used in field measurement. (Note: Measurement equipment should be calibrated for both dBA and dBC measurements and corrected and interpreted using NIOSH Method #2. The latter is defined in: Berger, E. H. (1980), *Sound Vibration* 14(1), 6-7.) While this measure is the commonly used standard, it may not adequately account for the low frequency noise produced by wind turbines.

dBC: The measure of ambient sound pressure and the integral of P_{rms} weighted by a function that is essentially flat over the audible range of frequencies.

Guy wire: A tensioned cable between the tower and the ground or other surface for lateral support.

Height: The vertical measurement of the tower from the base of the tower to the top of the tower.

kW: Power expressed in kilowatts.

Lot: A parcel of land undivided by any street or public road.

Nameplate capacity: The electrical power rating of an individual wind turbine, as certified by the turbine manufacturer, normally expressed in watts, kilowatts (kW), or megawatts (MW).

Properly credentialed professional: A professional acoustical engineer who is a member of the Institute of Noise Control Engineering (INCE) or who possesses some comparable qualification.

Scenic resource: Either a scenic resource of state or national significance, as defined in 35-A M.R.S.A. §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.

Shadow flicker: Alternating changes in light intensity caused by the rotating elements of a wind energy facility.

Short-term weather event: Any storm lasting twelve (12) hours or less.

Structure: Anything built for the support, shelter or enclosure of persons, animals, goods or property of any kind.

Tower: The free-standing or guy-wired structure on which a wind energy conversion system is mounted.

Turbine: A rotating device used to convert the physical energy exerted by wind passing across its blades into electrical energy.

Wind energy facility (WEF) or system (WES): All equipment, structures, roads and power lines that together form a system for the production of electrical power using ambient wind as the source of motive power.

Wind turbine: The blades, rotor, and associated mechanical and electrical conversion components including the supporting tower.