

WIND TURBINE ORDINANCE

TOWN OF DEDHAM, MAINE

Purpose: The purpose of this ordinance is to regulate the placement and construction of Wind Energy Systems (WES) while preserving the Town's visual character, minimizing environmental impacts and protecting the public health, safety and welfare of the residents of Dedham.

Site Plan Review

- 1) **Permitting Authority:**
 - a) A WES for either residential or non-residential use shall be permitted through the Planning Board.
- 2) **Location:**
 - a) A WES is a permitted use in all districts.
 - b) On lots less than five (5) acres, no more than one (1) WES shall be allowed.
 - c) On lots five (5) acres or more, one (1) WES shall be allowed for every additional five acres (example: a lot totaling 11 acres shall be allowed three WES).
 - d) No more than three (3) WES shall be allowed on any single lot.
- 3) **Setbacks:**
 - a) All parts of a WES shall be setback from all adjoining property lines, roads, easements, right-of-ways (ROW), and habitable structures a minimum distance equal to 150 percent of the height of the tower and blade length (when blades are vertical) as measured from the ground.
 - b) Setbacks from the applicant/property owner's habitable structure can be reduced on a case-by-case basis, as long as other setback requirements can be met. (example: rooftop models)
- 4) **Height:**
 - a) A WES shall have a maximum height of 150 feet as measured from the ground to the tower's highest point.
- 5) **Noise:**
 - a) The WES shall not exceed 45 dBA as measured at the adjoining property lines and habitable structures, except during short-term weather events such as severe wind storms.
 - b) Upon complaint of an abutter, ambient and maximum permitted decibel measurements shall be performed by an agent designed by the Planning Board. The 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 owner of the system shall pay the fee.
 - c) If the maximum decibel reading area is exceeded, the installation shall be considered a nuisance and must be corrected within 90 days from notification of the violation and if the violation cannot be corrected, the WES shall be removed or relocated.
- 6) **Scenic/Visual Impact:** The WES shall not unreasonably obstruct the view of habitable structures on abutting or adjacent properties.

- 7) **Submission Requirements:** For all WESs the following submissions shall be required unless waived:

EXHIBIT 1: COMPLETED APPLICATION (provided by the Code Enforcement Officer).

EXHIBIT 2: SITE LOCATION MAP: A USGS quadrangle map (sized to 8 1/2" x 11") of the property on which the WES is proposed, with the general area cross-hatched or otherwise graphically identified.

EXHIBIT 3: TAX MAP: Town of Dedham Property Tax Map (8 1/2" x 11") on which the WES is proposed, with the property cross-hatched or otherwise graphically identified. *Copies of these maps are available at the Town Office.*

EXHIBIT 4: PROJECT DESCRIPTION: Including specific information on the type, size, tower type and height, rotor material and diameter, rated power output, performance, safety and noise, manufacturer, model and serial number of the WES.

EXHIBIT 5: SITE PLAN: On the subject property show the planned location of the WES as well as the location of and distance to:

- a) setback lines
- b) adjoining property lines
- c) roads
- d) easements
- e) ROW's
- f) habitable structures
- g) utility lines
- h) great ponds, streams and wetlands
- i) proposed access roads
- j) significant wildlife habitat
- k) erosion control BMP's

EXHIBIT 6: DESCRIPTION OF NORMAL AND EMERGENCY SHUTDOWN PROCEDURES AND BRAKING SYSTEM: An automatic braking, governing or feathering system shall be required to prevent uncontrolled rotation.

EXHIBIT 7: UTILITY CONTRACT: If connecting 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.

EXHIBIT 8: PHOTOGRAPHS: Photographs of the proposed site.

EXHIBIT 9: SCENIC ASSESSMENT: The Planning Board may require a scenic assessment for a WES consisting of one or more of the following;

- a) A visual analysis composed of elevation drawings of the proposed WES 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 WES would be visible from a designated scenic resource, the tree line elevation of vegetation within 100 feet and the distance to the proposed facility from the designated scenic resources noted viewpoints.

EXHIBIT 10: DESIGN STANDARDS:

- a) All components of a WES used to generate electricity including blades and all necessary parts shall not have a diameter of more than 50 feet.
 - b) The minimum distance between the ground and any wind turbine blades of a WES shall be 25 feet as measured at the lowest arc of the blades.
 - c) A WES shall be equipped with both manual and automatic over-speed controls.
 - d) The WES shall be operated and located such that no disruptive electromagnetic interference with signal transmission or reception is caused beyond the site. If it is demonstrated that the system is causing disruptive interference beyond the site, the system operator shall promptly eliminate the disruptive interference or cease operation of the system.
 - e) The WES shall be designed and installed such that unauthorized public access via step bolts or a ladder is prevented for a minimum of 12 feet above the ground.
 - f) The WES shall incorporate a non-reflective surface to minimize any visual disruptions.
 - g) 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 by the permitting authority if the project terrain is determined to be unsuitable for underground installation.
 - h) The WES shall not be lighted unless required by the FAA.
 - i) The WES shall not display any permanent or temporary signs, writing, symbols, logos or any graphic representation of any kind except appropriate manufacturer's or installer's identification and warning signs.
- 8) **Abandonment:** A WES which is not generating electricity for twelve (12) consecutive months shall be deemed abandoned and shall be dismantled and removed from the property by the owner with 120 days of receipt of notice from the town. A WES owner may request in writing to the Code Enforcement Officer an extension of up to one (1) year if the owner is actively pursuing the repair of the WES for future use.
- 9) **Enforcement**
- a) Nuisances. Any violation of this Ordinance shall be deemed to be a nuisance.
 - b) Code Enforcement Officer
 - i. It shall be the duty of the Code Enforcement Officer to enforce the provisions of this Ordinance. If the Code Enforcement Officer shall find that any provision of this Ordinance is being violated, he or she shall notify in writing the person responsible for such violation, indicating the nature of the violation and ordering the action necessary to correct it, including discontinuance of illegal use of land, buildings or structures, or work being done, removal of illegal buildings or structures, and abatement of nuisance conditions. A copy of such notices shall be submitted to the municipal officers and be maintained as a permanent record.
 - ii. The Code Enforcement Officer shall conduct on-site inspections to ensure compliance with all applicable laws and conditions attached to permit approvals. The Code Enforcement Officer shall also investigate all complaints of alleged violations of this Ordinance.
 - iii. The Code Enforcement Officer shall keep a complete record of all essential transactions of the office, including applications submitted, permits granted or denied, variances granted or denied, revocation actions, revocation of permits, appeals, court actions, violations investigated, violations found, and fees collected. On a biennial basis, a summary of this record shall be submitted to the Director of the Bureau of Land and Water Quality within the Department of Environmental Protection.

c) Legal Actions. When the above action does not result in the correction or abatement of the violation or nuisance condition, the Municipal Officers, upon notice from the Code Enforcement Officer, are hereby directed to institute any and all actions and proceedings, either legal or equitable, including seeking injunctions of violations and the imposition of fines, that may be appropriate or necessary to enforce the provisions of this Ordinance in the name of the municipality. The municipal officers, or their authorized agent, are hereby 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 an illegal structure or use to continue unless there is clear and convincing evidence that the illegal structure or use was constructed or conducted as a direct result of erroneous advice given by an authorized municipal official and there is no evidence that the owner acted in bad faith, or unless the removal of the structure or use will result in a threat or hazard to public health and safety or will result in substantial environmental damage.

10) **Definitions:**

WIND ENERGY SYSTEM – A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics.

WIND TURBINE – The blades, rotor, and associated mechanical and electrical conversion components mounted on top of the supporting tower.

LOT – A single parcel of land as defined by current state laws.