

Article XXIII
Small Wind Energy Systems
(Adopted Town Meeting March 10, 2009)

23.1 Purpose:

This renewable energy systems ordinance is enacted in accordance with RSA 674:17(I)(j), 674:62-66, and the purposes outlined in RSA 672:1-III-a as amended and effective July 11, 2009. The purpose of this ordinance is to accommodate renewable energy systems and distributed generation resources in appropriate locations, while protecting the public's health, safety and welfare. The Town of Epping intends to facilitate the State and National goals of developing clean, safe, renewable energy resources in accordance with the enumerated polices of NH RSA 374-G and 362-F that include national security and economic and environmental sustainability. In addition, this ordinance provides a permitting process for wind energy systems to ensure compliance with the provisions of the requirements and standards established herein in accordance with treatment under state law referenced above and in accordance with the conditional use process as authorized by NH RSA 674:21.

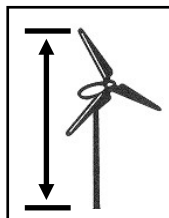
23.2 Definitions:

Meteorological tower (met tower). Includes the tower, base plate, anchors, guy wires and hardware, anemometers (wind speed indicators), wind direction vanes, booms to hold equipment for anemometers and vanes, data loggers, instrument wiring, and any telemetry devices that are used to monitor or transmit wind speed and wind flow characteristics over a period of time for either instantaneous wind information or to characterize the wind resource at a given location. For the purpose of this ordinance, met towers shall refer only to those whose purpose are to analyze the environmental factors needed to assess the potential to install, construct or erect a small wind energy system.

Modification. Any change to the small wind energy system that materially alters the size, type or location of the small wind energy system. Like-kind replacements shall not be construed to be a modification.

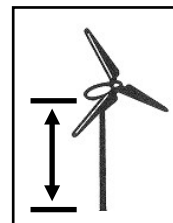
Small wind energy system. A wind energy conversion system consisting of a wind generator, a tower, and associated control or conversion electronics, which has a rated capacity of 100 kilowatts or less and will be used primarily for onsite consumption.

System height. The vertical distance from ground level to the tip of the wind generator blade when it is at its highest point.



Tower. The monopole, guyed monopole or lattice structure that supports a wind generator.

Tower height. The height above grade of the fixed portion of the tower, excluding the wind generator.



Wind generator. The blades and associated mechanical and electrical conversion components mounted on top of the tower whose purpose is to convert kinetic energy of the wind into rotational energy used to generate electricity.

23.3 Procedure for Review:

1. **Building Permit:** Wind energy systems that are 75 feet or less in height shall only require a building permit for installation.

Conditional Use Permit: Wind energy systems that exceed 75 feet but are less than 120 feet in height are subject to conditional use permit approval by the Planning Board in all permitted zoning districts. The conditional use permit shall clearly set forth all conditions of approval and shall list all plans, drawings and other submittals that are part of the approved use. Everything shown or otherwise indicated on a plan or submittal that is listed on the conditional use permit shall be considered to be a condition of approval.

2. **Permitted Zoning Districts:** Wind energy systems, and where applicable met towers, shall be permitted by conditional use in all zones and under the application requirements specified under Section 23.4:

3. **Met Towers:** A met tower, used solely for collecting wind resource data that does not produce any distributable electrical power and will stand no higher than 120 feet high may be erected within wind energy system permitted zones upon obtaining a building permit from the building inspector and shall be permitted on a temporary basis not to exceed 2 years, unless extended for one additional year, from the date the building permit was issued. In the event the submitted building permit appears to exceed the definition of a met tower, the building inspector may request the applicant obtain a conditional permit from the Planning Board. Upon such action, the building inspector must provide a description to the Planning Board identifying why the proposed met tower exceeds the provided definition.

4. **Application:** All applications for a wind energy system submitted to the Town of Epping for a building permit or for a conditional use permit shall contain the information specified below:

- A. Property lines and physical dimensions of the applicant's property (a survey is not required).
- B. Location, dimensions, and types of existing major structures on the property.
- C. Location of the proposed wind energy system, foundations, guy anchors and associated equipment.
- D. Tower foundation blueprints or drawings.
- E. Tower blueprints or drawings.
- F. Setback requirements as outlined in this ordinance.
- G. The right-of-way of any public road that is contiguous with the property.
- H. Any overhead utility lines.
- I. Wind energy system specifications, including manufacturer, model, rotor diameter, tower height, tower type, nameplate generation capacity.
- J. Sound level information provided by the wind generator manufacturer or qualified engineer.
- K. Electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the applicable building code for the Town of Epping.
- L. Evidence of compliance or non-applicability with Federal Aviation Administration requirements.

5. **Abutter and Regional Notification:** In accordance with RSA 674:66, the Town shall notify all abutters and the local governing body by certified mail upon application submittal to the Town for a conditional use permit to construct a small wind energy system. The public will be afforded 30 days to submit comments to the building inspector prior to the issuance of the building permit. The building inspector shall review the application for a building for regional impacts per RSA 36:55. If the proposal is determined to have potential regional impacts, the building inspector shall follow the procedures set forth in RSA 36:57, IV.

23.4 Standards:

1. The planning board or building inspector shall evaluate the application for compliance with the following standards;

- a. **Setbacks:** The setback shall be calculated by multiplying the minimum setback requirement number by the system height and measured from the center of the tower base to property line, public roads, or nearest point on the foundation of an occupied building.

Minimum Setback Requirements			
Occupied Buildings on Participating Landowner Property	Occupied Buildings on Abutting Property	Property Lines of Abutting Property and Utility Lines	Public Roads
0	1.5	1.1	1.5

- i) Small wind energy systems must meet all setbacks for principal structures for the zoning district in which the system is located.
- ii) Guy wires used to support the tower are exempt from the small wind energy system setback requirements.
- b. **Tower:** The maximum tower height shall be limited by operation of Section 23.3(1).
- c. **Sound Level:** The small wind energy system shall not exceed 60 decibels using the A scale (dBA), as measured at the site property line, except during short-term events such as severe wind storms and utility outages.
- d. **Signs:** All signs including flags streamers and decorative items, both temporary and permanent, are prohibited on the small wind energy system, except for manufacturer identification or appropriate warning signs, which shall not exceed 3 square feet.
- e. **Code Compliance:** The small wind energy system shall comply with all applicable sections of the Town of Epping Building Code.
- f. **Aviation:** The small wind energy system shall be built to comply with all applicable Federal Aviation Administration regulations including but not limited to 14 C.F.R. part 77, subpart B regarding installations close to airports, and the New Hampshire Aviation regulations, including but not limited to RSA 422-b and RSA 424.
- g. **Visual Impacts:** It is inherent that small wind energy systems may pose some visual impacts due to the tower height needed to access wind resources. The purpose of this section is to reduce the visual impacts, without restricting the owner’s access to the optimal wind resources on the property.
- i) The applicant shall demonstrate through project site planning and proposed mitigation

that the small wind energy system's visual impacts will be minimized for surrounding neighbors and the community. This may include, but not be limited to information regarding site selection, wind generator design or appearance, buffering, and screening of ground mounted electrical and control equipment.

- ii) The color of the small wind energy system shall be a non-reflective, unobtrusive color that blends in with the surrounding environment. Approved colors include but are not limited to white, off-white or gray.
 - iii) A small wind energy system shall not be artificially lit unless such lighting is required by the Federal Aviation Administration (FAA). If lighting is required, the applicant shall provide a copy of the FAA determination to establish the required markings and/or lights for the small wind energy system.
- h) Access: The tower shall be designed and installed so as not to provide step bolts or a ladder readily accessible to the public for a minimum height of 8 feet above the ground. All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.

23.5 Abandonment:

1. At such time that a small wind energy system is scheduled to be abandoned or discontinued, the applicant will notify the building inspector by certified U.S. mail of the proposed date of abandonment or discontinuation of operations.
2. Upon abandonment or discontinuation of use, the owner shall physically remove the small wind energy system within 90 days from the date of abandonment or discontinuation of use. This period may be extended at the request of the owner and at the discretion of the building inspector. "Physically remove" shall include, but not be limited to:
 - a. Removal of the wind generator and tower and related above-grade structures.
 - b. Restoration of the location of the small wind energy system to its natural condition, except that any landscaping, grading or below-grade foundation may remain in its same condition at initiation of abandonment.

23.6 Violation:

It is unlawful for any person to construct, install, or operate a small wind energy system that is not in compliance with this ordinance.

23.7 Penalties:

Any person who fails to comply with any provision of this ordinance or a building permit issued pursuant to this ordinance shall be subject to enforcement and penalties in accordance with New Hampshire law.