

Town of Greenville Wind Energy Facilities Ordinance (6/4/18)

TOWN OF GREENVILLE WIND ENERGY FACILITIES ORDINANCE

Whereas, the Town of Greenville is the gateway to the Moosehead Lake Region, and both the Town and the Region's people and economy rely on the health of the area's scenic, cultural, and natural resources; and

Whereas, wind energy facilities, including wind turbines, meteorological towers, transmissions lines, and other related infrastructure, can have negative impacts on the public health, safety, and welfare from hazards including, but not limited to, acoustics and sound, falling debris, and shadow flicker; and

Whereas, wind energy facilities, including wind turbines, meteorological towers, transmissions lines, and other related infrastructure, can negatively affect scenic, cultural, and natural resources from impacts including, but not limited to, bird and bat mortality, loss of wildlife habitat, and viewshed impacts; and

Whereas, the Town of Greenville recognizes the value of properly sited wind energy facilities, so long as their size and impact are limited so as not to harm the public, health, safety, and welfare of the residents of Greenville and the area's scenic, cultural, and natural resources; now, therefore,

Be it enacted by the People of the Town of Greenville as follows:

Section 1. Purpose. The purpose of this Ordinance is to provide standards for regulating Wind Energy Facilities used to produce electrical power; more specifically, these standards are intended to:

- a. Establish clear guidelines and standards for Wind Energy Facilities so the Town can fairly and responsibly protect the public health, safety, and welfare of the community;
- b. Support the development of wind energy systems in a manner that minimizes any potential adverse effects on the scenic, cultural, and natural resource character of the Town;
- c. Recognize the importance of the Town's scenic, cultural, and natural resources to the economic and social well-being of the community; and
- d. Support the goals and policies of the Comprehensive Plan, including orderly development and protection of natural, scenic, and cultural resources.

Section 2. Authority. This Ordinance is enacted pursuant to the enabling provisions of Article VIII, Part 2, § 1 of the Maine Constitution, the provisions of Title 30-A M.R.S.A § 3001 (Home Rule), and the provisions of Title 30-A § 4312 et. seq. (Comprehensive Planning and Land Use Regulation, or "Growth Management" Act).

Section 3. Applicability. Notwithstanding the provisions of 1 M.R.S.A. § 302, this Ordinance is applicable, as of its effective date, and to the maximum extent permitted by law and subject to the severability clause below, to all proceedings, applications, and petitions that have not been submitted and finally acted on for all Wind Energy Facilities, Small Wind Energy Facilities, and Meteorological Towers. This Ordinance shall also apply to all Wind Energy Facilities, Small Wind Energy Facilities, and Meteorological Towers proposed, operated, modified, or constructed after the enactment of these provisions.

Town of Greenville Wind Energy Facilities Ordinance (6/4/18)

Section 4. Definitions. As used in this Ordinance, unless the context otherwise indicates, the terms referenced below have the following meanings:

Code Enforcement Officer – Means the Town of Greenville Code Enforcement Officer.

Land Use Ordinance – Means Land Use Ordinance for the Town of Greenville.

Meteorological Tower (MET) - 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. METs may also include wildlife related equipment such as ANABAT detectors, bird diverts, and wildlife entanglement protectors.

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.

Planning Board – Means the Town of Greenville Planning Board.

Small Wind Energy Facility (SWEF) – Means a wind energy facility consisting of a wind turbine, a tower, footings, electrical infrastructure, and associated equipment or structures intended to produce electrical power primarily for on-site consumption, except that when a parcel on which the facility is installed also receives electrical power supplied by an utility company, excess electrical power generated and not presently needed for onsite use may be conveyed to the utility company. *A Small Wind Energy Facility may not have a rated capacity of more than 10 kilowatts.*

Tower – Means the free-standing structure on which a wind measuring or wind energy facility is mounted.

Total Height – Means the vertical distance measured from a point on the ground at the foundation as calculated by averaging the highest and lowest finished grade around the wind energy facility tower to the highest point of the wind turbine blade when the tip is at its full vertical position.

Wind Energy Facility – Means a wind energy facility consisting of a wind turbine, a tower, footings, electrical infrastructure, and associated equipment or structures intended to produce electrical power. *A Wind Energy Facility with rated capacity of more than 10 kilowatts is prohibited in the Town of Greenville.*

Section 5. Administration and Enforcement.

- a. This Ordinance will be administered through the provisions of the Land Use Ordinance, specifically Articles II (Administration and Enforcement) and Article III (Permitting Requirements and Procedures), which are hereby incorporated by reference. Specific application requirements, standards of review, and other requirements pertinent to Small Wind Energy Facilities (SWEF) and Meteorological Towers (MET) within this Ordinance shall be added to the Application Requirements and Standards of Approval within the Land Use Ordinance. In case of a conflict, the stricter provision shall apply.
- b. **Permit Required.** A Conditional Use Permit from the Planning Board is required prior to the installation, construction, or expansion of a SWEF or MET. SWEFs and METs must meet the requirements of this Ordinance and the Land Use Ordinance. All SWEFs and METs must also meet all federal and state electrical codes and permitting requirements.
- c. **Permit for Modifications.** Any physical modification to an existing SWEF or MET that materially alters the location, or increases the area of development on the site, or that increases the turbine height or the level of sound emissions of any wind turbine shall require a permit modification under this Ordinance. Like-kind replacements and routine maintenance and repairs shall not require a permit modification.

Town of Greenville Wind Energy Facilities Ordinance (6/4/18)

Section 6. Application Requirements. In addition to the requirements listed in Article III of the Land Use Ordinance, all SWEF and MET applications shall be submitted to the Code Enforcement Officer and must include the following information:

- a. A description of the project, including the number and maximum name rated capacity of all SWEFs or METs.
- b. A Site Plan with the following information:
 - 1) property lines and physical dimensions of the applicant's property and abutter's property.
 - 2) location, dimensions, and types of existing major structures, including, but not limited to homes and businesses, on the property and on all abutting properties within 300 feet of the proposed SWEF or MET;
 - 3) location of the proposed SWEF or MET, including foundations and associated equipment, along with setback requirements as outlined in this Ordinance;
 - 4) the location of any right-of-way for a public or private road or parking area that is contiguous with the property;
 - 5) the location of any overhead utilities and other utility easements;
 - 6) identification of land cover, wetlands, streams, water bodies, and areas proposed to be re-graded or cleared of vegetation on the applicant's property; and
 - 7) the location and average height of tree cover to be retained on the site, and the variety, planting height, and mature height of proposed trees, if any.
- c. SWEF specifications, including manufacturer, model, rotor diameter, tower height, system height, tower type, nameplate generation capacity, and the estimated generation capacity based on average annual wind speed at the site based on meteorological tower data or as estimated using data from the U.S. Department of Energy or another acceptable source.
- d. Tower structural and foundation blueprints or drawings that have been prepared either: 1) by the tower manufacturer, 2) in accordance with the manufacturer's specifications, or 3) by a Maine-licensed professional engineer (plans must include engineer's stamp).
- e. Evidence demonstrating that a proposed SWEF or MET that will be installed on a structure that meets the manufacture's installation guidelines.
- f. Evidence that the proposed tower height will not exceed the height recommended by the manufacturer or distributor of the system.
- g. Evidence to demonstrate that the SWEF will conform to the National Electrical Code, the International Building Code, Federal Aviation Administration requirements, and any other relevant regulations.
- h. Evidence that the electrical utility service provider that serves the proposed site has been informed of the applicant's intent to install an interconnected customer-owned electrical generator, unless the applicant does not plan, and so states in the application, to connect the system to the electricity grid.
- i. Evidence that the SWEF will meet the signal interference, sound level requirements, lighting requirements and other standards of this Ordinance.

Section 7. Meteorological Towers (MET). A permit for a MET shall be valid for 2 years from the date of issuance. The Code Enforcement Officer may grant one or more one-year extensions of this permit period. Within 30 days following removal of a MET, the Applicant shall restore the site to its original condition.

Town of Greenville Wind Energy Facilities Ordinance (6/4/18)

Section 8. Requirements and Standards of Approval. All SWEFs and METs, as applicable, shall comply with the following requirements and standards:

- a. Location:
 - 1) SWEFs and METs may be located within the following districts: the Commercial/Industrial District, the Rural Development Districts, and the Rural District. SWEFs and METs are prohibited in the Residential District, Village District, Downtown District, Airport District, the Scenic Corridor Overlay District, the Resource Protection District, and all Shoreland Zones.
 - 2) A Wind Energy Facility with rated capacity of more than 10 kilowatts is prohibited in the Town of Greenville.
- b. Dimensional Requirements:
 - 1) Minimum Lot Size: The minimum lot size per single SWEF shall be 1-acre.
 - 2) Maximum Height: The total height of a SWEF or MET shall not exceed 100 feet.
 - 3) Safety Setbacks: All SWEFs and METs shall be set back a horizontal distance equivalent to 110% of the total height of the SWEF or MET from property boundaries, public and private rights-of-way, parking areas for non-residential uses, and overhead utility lines that are not part of the proposed SWEF or MET.
- c. On-Site Consumption: SWEFs shall be primarily used to produce electrical power for on-site consumption.
- d. Maximum Rated Power Output: The total combined rated power output for a SWEF shall not exceed 10 kilowatts.
- e. Structure Type:
 - 1) With the exception of MET, towers shall be monopoles with no guy wires. This requirement may be waived if the applicant demonstrates to the satisfaction of the Planning Board, that there is no practicable alternative. Bird flight diverters must be installed on any guy wires that are permitted.
 - 2) Roof and building mounted SWEFs are permitted with evidence certified by an appropriately licensed professional that the roof and building are capable of supporting the collateral load of the SWEF.
- f. Code Compliance: All SWEFs and METs, including all electrical components and interconnections, shall comply with all applicable sections of the National Electrical Code (NEC), and all other applicable local and state building codes.
- g. Utility Connection: If the proposed SWEF is to be connected to the power grid, it shall adhere to Maine Public Utilities Commission Rules (MPUC).
- h. Aviation: All SWEFs or METs shall comply with applicable Federal Aviation Administration (FAA) rules and regulations.
- i. Overspeed Controls and Brakes: All SWEFs shall be equipped with over speed controls, unless the manufacturer's recommendations state otherwise, to limit the blade rotation speed to within the design limits of the unit.
- j. Access: All ground-mounted towers shall be constructed to provide one, or more, of the following means of access control:
 - 1) a tower climbing apparatus located no closer than 12 feet from the ground;
 - 2) a locked anti-climb device installed on the tower;
 - 3) a locked protective fence at least 6 feet in height that encloses the tower; or
 - 4) another appropriate method of access control.

Town of Greenville Wind Energy Facilities Ordinance (6/4/18)

- k. Blade Clearance: The minimum distance between the ground and any part of the rotor or blade system of a SWEF shall be 20 feet as measured at the lowest arc of the blades.
- l. Signal Interference: All SWEFs shall be operated and located such that no disruptive electromagnetic interference with signal transmission or reception is caused beyond the site. If it has been demonstrated that the system is causing disruptive interference beyond the site, the owner of the facility shall promptly eliminate the disruptive interference or cease operation of the system.
- m. Signs: All signs including flags, streamers, and decorative items, both temporary and permanent, are prohibited on all SWEFs or METs, except for manufacturer identification or appropriate warning signs.
- n. Visual Impacts:
 - 1) All electrical conduits shall be underground.
 - 2) All SWEFs or METs shall be a non-obtrusive color such as white, off-white, or gray.
 - 3) Exterior Lighting.
 - i) Exterior lighting on any tower or turbine associated with a SWEF or MET shall not be allowed except that which is specifically required by the Federal Aviation Administration (FAA). If lighting is required by the FAA, the applicant shall provide a copy of the FAA determination to establish the required markings and/or lights for the SWEF or MET.
 - ii) Notwithstanding i) above, security lighting is allowed, but must not be located higher than 10 feet from ground level, and must be down-directional to retain light within the boundaries of the site. Motion-sensitive lighting may be required.
 - 4) To the extent that doing so does not inhibit adequate access to the wind resource, each SWEF and MET shall be located to maximize the effectiveness of existing vegetation, structures, and topographic features in screening views of the tower or turbine from occupied buildings and scenic resources, including great ponds, public parks, Moosehead Lake Road, Lily Bay Road, and downtown Greenville. SWEFs and METs shall not be located on top of prominent ridgelines, but may be located below the ridgeline to reduce the tower's visibility from the aforementioned scenic resources.
 - 5) When existing features do not screen views of a tower or turbine from occupied buildings or 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 tower or turbine, plantings should be situated as near as possible to the point from which the tower or turbine is being viewed. Such plantings should be of native plant varieties.
- o. Sound: Except during unusual short-term events such as severe wind storms, the audible noise due to wind turbine operations shall not exceed 35 dBA above an established baseline for any contiguous 5 minute period at any point along the property boundary line of the site. Upon complaint of excessive noise levels, the decibel measurements shall be performed by a properly credentialed professional designated by the Town of Greenville and the report submitted to the Town. The fee for this service shall be paid for by the complainant. If the maximum decibel readings are exceeded then the SWEF owner shall correct the violation and reimburse the complainant within 90 days of notice by the Code Enforcement Officer and reimburse the Town for the fee of the noise level measurements.
- p. Maintenance: The SWEF or MET owner shall maintain the facilities in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. The SWEF or MET must be properly maintained and be kept free from all

Town of Greenville Wind Energy Facilities Ordinance (6/4/18)

hazards, including, but not limited to, faulty wiring, loose fastenings, being in an unsafe condition, or detrimental to public health, safety, or general welfare.

- q. **Discontinued Use:** A SWEF that is not generating electricity or a MET that is not in operation for 12 consecutive months shall be deemed a discontinued use. The owner of the SWEF or MET shall notify the Code Enforcement Officer when the use of the SWEF or MET has been discontinued. The discontinued SWEF or MET shall be removed by the owner within 120 days of receipt of notice from the Code Enforcement Officer, unless the owner provides information that the Code Enforcement Officer deems sufficient to demonstrate that the project has not been discontinued and should not be removed. If the SWEF or MET is not removed within this time period, the Town may remove the turbine or tower at the owner's expense. The owner 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.

Section 9. Conflict and Severability

- a. 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 Town of Greenville ordinance, the provisions of this Ordinance shall apply.
- b. The invalidity of any part of this Ordinance shall not invalidate any other part of this Ordinance.

Section 10. Effective Date. This Ordinance becomes effective on June 4, 2018.