

Buffalo County
Wind Energy Facility Zoning
Ordinance

Final Draft Wind Energy Facility Ordinance for Buffalo County

1. Title

This zoning ordinance shall be referred to as the Wind Energy Facility Zoning Ordinance.

2. Purpose

The purpose of the Ordinance is to provide a regulatory scheme for the construction and operation of wind energy facilities (W.E.F's) in Buffalo County, subject to reasonable restrictions, which will preserve the public health, safety, and general welfare.

3. Authority

This ordinance is adopted pursuant to authority granted by Wisconsin State Statutes Sections: 59.69, 59.694, 66.0401, and 66.0103

4. Applicability

This ordinance shall apply to all lands within the boundaries of Buffalo County lying outside the limits of the incorporated cities and villages.

5. Future Statutory Amendments, Revisions, and Modifications

Any future amendments, revisions, and/or modifications of any portion of the Wisconsin State Statutes referred to in this ordinance are incorporated herein and made part of this ordinance.

6. Definitions

As used in this ordinance, the following terms shall have the meanings indicated:

Bluffline: A line connecting points at which slope of a bluff becomes less than 12%

Board of Adjustment: The Buffalo County Zoning Board of Adjustment

FAA: The Federal Aviation Administration.

FCC: Federal Communications Commission

Habitable Structure: Any structure designed or used for human habitation.

Hub Height: When referring to a wind turbine, the distance measured from ground level to the center of the turbine hub.

MET Tower: A meteorological tower used for the measurement of wind speed. Experimental towers shall be placed only after issuance of a zoning permit and such permit shall expire within 18 months from issuance. The tower(s) in question shall meet all setbacks as required for wind energy facilities.

Shadow Flicker: The moving shadows cast when the turbine blades are rotating.

Total Height: When referring to a wind turbine, the distance measured from ground level to the blade extended at its highest point.

Wind Energy Facility (W.E.F): An electricity generating facility consisting of one or more wind turbines and includes all substations, MET Towers, cables/wires and other buildings accessory to such facility.

Wind Energy Facility Zoning Permit: A land use permit allowing the construction and operating of a W.E.F in accordance with the provisions of this ordinance. Permit may only be issued after the issuance of a conditional use permit.

Wind Turbine: A wind energy conversion system which converts wind energy into electricity through the use of a wind turbine generator and includes the turbine, blade, tower, base and pad transformer, if any; provided that such a system shall only be a wind turbine for purposes of this ordinance if it has a total height greater than 100 feet or nameplate capacity of greater than 100 kilowatts.

7. Regulatory Framework

7.1 Zoning

7.1.1 Wind energy facilities (WEF's) may be constructed as a principle use or accessory to a permitted use only in areas that are zoned Agricultural on the official zoning map for Buffalo County.

7.1.2 Wind energy facilities may only be permitted as accessory to a permitted use in the Residential, Recreational, Industrial and Commercial Districts.

7.2 Wind Energy Facility Permit Issuance: No wind energy facility shall be constructed, located, installed, reconstructed, enlarged, or relocated, including the placement of additional buildings or other supporting equipment used in connection with said wind energy facility, without first obtaining a conditional use permit from the Board of Adjustment and a zoning permit from the Zoning Administrator or designee.

7.3 All conditional use applications must include the following documents:

- (a) A signed, notarized statement from the applicant assuming responsibility for reimbursement to the town, county and/or state DOT for all repairs and reconstruction to town, county, state and/or federal roads resulting directly from the construction of the W.E.F. A qualified independent third party, agreed to by the applicable entity(s), and paid for by the applicant, shall be hired to pre-inspect the roadways to be used during construction. This third party shall be hired to evaluate, document, and rate road condition prior to construction of the W.E.F and again 30 days after the project is completed. Any road damage done by the permit applicant or one or more of its contract's or subcontractors shall be repaired or reconstructed at the permit applicant's expense. The permit applicant shall provide the town, county, or state with written notices of completion of construction within 30 days after the project is complete. Road repairs shall be paid for within 90 days of completion of the W.E.F. project unless otherwise negotiated by the applicable entities. Any future road damage caused by the

permit holder or their agents during the repair, replacement, or decommissioning of any wind turbine(s) during the life of the project shall be paid for by the permit holder.

- (b) Federal Aviation Administration (FAA) and Federal Communications Commission (FCC) approval of a proposed site and W.E.F construction plan shall be made part of the application.
- (c) A map showing a proposed grid of any future wind energy facilities in the applicant's current phase or project.
- (d) A plan for abandonment included in the leasing arrangement and a bond or letter of surety as required by the Board of Adjustment shall be part of the application to cover the cost of abandonment should the applicant default. Notification shall be made to the Buffalo County Zoning Department whenever transfer in ownership of the facility or appurtenant equipment is made. A performance bond or letter of surety shall be required of all future owners, heirs or assignees in the event an owner defaults so that the county will recover costs associated with abandonment of the wind energy facility.
- (e) A document including an accompanying aerial photo if necessary, showing the shadow flicker projection.
- (f) A line of sight study which depicts the viewing angles from the valley below of the proposed W.E.F. An additional study may be required if project is in view of navigable waters.

7.4 The following conditions may be attached to the conditional use permit:

- (g) Lighting and painting of towers shall conform to all Federal Aviation Administration (FAA) standards. Flashing or strobe lights shall be installed only if required by FAA regulations and if specified in the application. Strobe lights shall not be used during hours of darkness unless required by FAA standards.
- (h) There shall be no change in the height of the wind turbines, lighting or light intensity, facility use or other changes in a tower or appurtenant structure(s) unless modification of the original conditional use permit is obtained through the Buffalo County Board of Adjustment through the regular conditional use process.
- (i) Access to the facility shall be constructed and maintained in a manner designed to provide maneuverability for service and emergency response vehicles. Inability to access the wind energy facility or equipment site(s) because of poor road construction and/or poor road maintenance shall be at the discretion of the responding agency(s) for that jurisdictional area.
- (j) Inoperation of any wind turbine(s) for a period of 12 consecutive months shall require abandonment to a depth of 4' below ground level.
- (k) This list of standards shall in no way limit additional conditions or requirements that the Board of Adjustment may require prior to acting on an application.

8. Applicability

The requirements of this ordinance shall apply to all wind energy facilities proposed after the effective date of this ordinance. Wind energy facilities for which a required permit has been properly issued prior to the effective date of this ordinance shall not be required to meet the requirements of this ordinance; provided however that any such pre-existing wind energy facility which does not provide energy for a continuous period of 12 months shall meet the requirements

of this ordinance prior to recommencing production of energy. However, no modification or alteration to an existing wind energy facility shall be allowed without full compliance with this ordinance.

9. General Requirements for Wind Energy Facilities

9.1 Visual Appearance; Lighting; Power Lines

- 9.1.1 Wind turbines shall be painted a non-reflective, non-obtrusive color
- 9.1.2 At wind energy facility sites, the design of the buildings and related structures shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend the wind energy facility to the natural setting and then existing environment.
- 9.1.3 Wind energy facilities shall not be artificially lighted, except to the extent required by the FAA or other applicable authority.
- 9.1.4 Wind turbines shall not be used for displaying any advertising except for reasonable identification for the manufacturer or operator of the wind energy facilities.
- 9.1.5 Electrical controls and control wiring and power-lines shall be wireless or not above ground except where wind farm collector wiring is brought together for connection to the transmission or distribution network, adjacent to that network.
- 9.1.6 Setbacks: The following setbacks and separation requirements shall apply to all wind turbines provided however that the Board of Adjustment may reduce the standard setbacks and separation requirements if the intent of this ordinance would be better served thereby upon a successful petition for variance.
 - 9.1.6.1 Blufflines: Each wind turbine shall be set back from all blufflines.
 - 9.1.6.2 Habitable Structures: Each wind turbine shall be setback from a habitable structure a distance 50' plus the height of the turbine from ground level to tip of blade at maximum height.
 - 9.1.6.3 Property Lines: Each wind turbine shall be set back from the nearest property line 50' plus the height of the turbine from ground level to tip of blade at maximum height.
 - 9.1.6.4 Public Roads: Each wind turbine shall be set back from the nearest public road right-of-way a distance of 50' plus the height of the wind turbine, determined at the nearest boundary of the underlying right-of-way for such public road.
 - 9.1.6.5 Communication and Electrical Power Lines: Each wind turbine shall be setback from the nearest above-ground electric power line or telephone line a distance of 50' plus the height of the tower, as determined from the existing line unless appropriate easements are obtained from the power or telephone company whose lines would be affected and recorded at Buffalo County Register of Deeds.
 - 9.1.6.6 Avian Mortality: All state and federal laws regarding avian mortality must be adhered to at all times. Notice of noncompliance with applicable avian standards may constitute re-opening and possible revocation of the conditional use permit.

9.2 Noise

- 9.2.1 Audible noise due to wind energy facility operations shall not exceed 50 dBA for any period of time, when measured at any inhabited structure.
- 9.2.2 In the event audible noise due to wind energy facility operations contains a steady pure tone, such as whine, screech, or hum, the standards for audible noise set forth in subparagraph 1) of this subsection shall be reduced by 5 dBA. A pure tone is defined to exist if the 1/3 octave band sound pressure level in the band, including the tone, exceeds the arithmetic average of the sound pressure levels of the 2 contiguous 1/3 octave bands by 5 dBA for center frequencies of 500 Hz and above by 8 dBA for center frequencies between one hundred and sixty Hz and 400Hz, or by 15 dBA for center frequencies less than or equal to 125 Hz.
- 9.2.3 In the event the ambient noise level (exclusive of the development in question) exceeds the applicable standard given above, the applicable standard shall be adjusted so as to equal the ambient noise level. The ambient noise level shall be expressed in terms of the highest whole number sound pressure level in dBA, which is succeeded for more than 5 minutes per hour. Ambient noise levels shall be measured at the exterior of potentially affected existing residences, schools, hospitals, churches and public libraries. Ambient noise level measurement techniques shall employ all practical means of reducing the effects of wind-generated noise at the microphone. Ambient noise level measurements may be performed when wind velocities at the proposed project site are sufficient to allow wind turbine operation, provided that the wind velocity does not exceed thirty miles per hour at the ambient noise measurement location.
- 9.2.4 Any noise level falling between two decibels shall be the lower of the two.
- 9.2.5 In the event the noise levels resulting from the wind energy facility exceed the criteria listed above, a waiver to said levels may be granted by the Board of Adjustment provided that the following has been accomplished:
 - 9.2.5.1 Written consent from the affected property owners has been obtained stating that they are aware of the wind energy facility and the noise limitations imposed by this ordinance and that consent is granted to allow noise levels to exceed the maximum limits otherwise allowed; and
 - 9.2.5.2 If the applicant wishes the waiver to apply to succeeding owners of the property, a permanent noise impact easement is recorded in the Buffalo County Register of Deeds which describes the benefited and burdened properties and which advises all subsequent owners of the burdened properties that noise levels in excess of those permitted by this ordinance may exist on or at the burdened property.

9.3 Minimum Ground Clearance: The blade tip of any wind turbine shall, at its lowest point, have a ground clearance of no less than 50 feet.

9.4 Signal Interference: The applicant shall take reasonable steps to minimize interference with electromagnetic communications, such as radio, telephone or television signals caused by any wind energy facility.

10. Safety

- 10.1 Wiring: All wiring between wind turbines and the wind energy facility substation shall be underground.
- 10.2 Turbine Access: Wind turbine towers shall not be climbable up to 15 feet above ground level.
- 10.3 Access Doors: All access doors to wind turbine towers and electrical equipment shall be lockable.
- 10.4 Warning Signs: Appropriate warning signs shall be placed on wind turbines towers, electrical equipment, and wind energy facility entrances.

11. Board Of Adjustment

11.1 Powers of the Board

11.1.1 It shall hear and decide conditional use applications.

11.1.2 It may authorize upon petition a variance from the terms of the ordinance as will not be contrary to the public interest, where owing to special conditions a literal enforcement of the provisions of the ordinance will result in unnecessary hardships and so that the spirit of the ordinance shall be observed and substantial justice done.

11.2 Appeals to The Board: May be taken by any person aggrieved or by an officer, department, board or bureau of the municipality affected by any decision of any other administrative officer. Such appeal shall be taken within 60 days, by filing with the officer from whom the appeal is taken and with the Board of Adjustment a notice of appeal specifying the grounds thereof. The officer from whom the appeal is taken shall forthwith transmit to the Board all the papers constituting the record upon which the action appealed from was taken.

11.3 Public Hearing: Upon filing with the Board of Adjustment of an appeal from a decision of the Zoning Administrator, an application for a conditional use or an application for a variance, the Board shall hold a public hearing. The Board shall, within 60 days, fix a date for the hearing and publish a Class II notice under Chapter 985 of the Wisconsin Statutes as well as giving due notice by mail to all parties in interest. The Board shall render a decision within 30 days of the date of the hearing.

11.4 Representation: At the hearing any party may appear in person or by agent or attorney and present written and oral evidence for the record.

12. ENFORCEMENT AND PENALTIES

Any person, firm, company, or corporation who violates, disobeys, omits, neglects or refuses to comply with or resist the enforcement of any of the provisions of the ordinance shall be subject to a fine of not less than ten (\$10.00) dollars nor more than two hundred (\$200.00) dollars, together with the cost of the action, and in default of payment thereof imprisonment in the county jail for a period of not less than one (1) day nor more than six (6) months, or until such fine and costs be paid. Compliance therewith may be enforced by injunctive order at the suit of the county or the owners of real estate within the district affected.

13. VALIDITY

Should any section, clause or provision of this ordinance be declared by the courts to be invalid, the same shall not affect the validity of the ordinance as a whole or any part thereof, other than the part so declared invalid.