

**ORDINANCE NO. 08--08**  
**SMALL WIND ENERGY SYSTEMS ORDINANCE**

**The Polk County Board of Supervisors, Polk County, Wisconsin, ordains as follows:**

**SECTION ONE – TITLE**

This ordinance may be referred to as the Small Wind Energy System Ordinance.

**SECTION TWO – AUTHORITY**

This ordinance is adopted pursuant to authority granted by:

Wis. Stat. § 60.61 or 60.62 and 62.23(7), or 60.22(3) and 66.0401

**SECTION THREE – PURPOSE**

The purpose of this ordinance is to:

- (1) Oversee the permitting of tower-mounted small wind energy systems. This ordinance does not apply to roof-mounted systems.
- (2) Preserve and protect public health and safety without significantly increasing the cost or decreasing the efficiency of a small wind energy system (per Wis. Stat. §. 66.0401).

**SECTION FOUR – DEFINITIONS**

In this ordinance:

- (1) “Administrator” means the Polk County Zoning Administration.
- (2) “Board” means the Polk County Land Information Committee.
- (3) “Major subdivision” means a subdivision creating five (5) or more lots and/or outlots, any of which are nineteen (19) acres or less in size, within a 5-year period from a parcel of land existing on June 30, 1996.
- (4) “Meteorological tower” (met tower) is defined to include the tower, base plate, anchors, guy cables and hardware, anemometers (wind speed indicators), wind direction vanes, booms to hold equipment anemometers and vanes, data logger, 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.
- (5) “Owner” shall mean the individual or entity that intends to own and operate the small wind energy system in accordance with this ordinance.
- (6) “Roof mounted” means a system mounted on & totally supported by a legal structure and not extending more than 20 feet above the highest point of said structure.

- (7) "Rotor diameter" means the cross sectional dimension of the circle swept by the rotating blades.
- (8) "Small wind energy system" means a wind energy system that
  - (a) is used to generate electricity;
  - (b) has a nameplate capacity of 100 kilowatts or less; and
  - (c) has a total height of 170 feet or less.
- (9) "St. Croix River Buffer Zone" means the area located outside of the St. Croix Riverway District and within two miles of the St. Croix River, measured from the ordinary high water mark.
- (10) "Total height" means the vertical distance from ground level to the tip of a wind generator blade when the tip is at its highest point.
- (11) "Tower" means the monopole, freestanding, or guyed structure that supports a wind generator.
- (12) "Wind energy system" means equipment that converts and then stores or transfers energy from the wind into usable forms of energy (as defined by Wis. Stat. §. 66.0403(1)(m)). This equipment includes any base, blade, foundation, generator, nacelle, rotor, tower, transformer, vane, wire, inverter, batteries or other component used in the system.
- (13) "Wind generator" means blades and associated mechanical and electrical conversion components mounted on top of the tower.

## **SECTION FIVE - STANDARDS**

A Land Use Permit shall be required for a small wind energy system in Agricultural, Exclusive Agricultural, Commercial, Restricted Commercial, Industrial, and Restricted Industrial Zoning Districts subject to the following requirements:

- (1) Setbacks. A wind tower for a small wind system shall be set back a distance equal to 110% of its total height from:
  - (a) any public road right of way, unless written permission is granted by the governmental entity with jurisdiction over the road;
  - (b) any overhead utility lines, unless written permission is granted by the affected utility;
  - (c) all property lines, unless written permission is granted from the affected land owner or neighbor.
- (2) Access.
  - (a) All ground mounted electrical and control equipment shall be labeled or secured to prevent unauthorized access.
  - (b) The tower shall be designed and installed so as to not provide step bolts or a ladder readily accessible to the public for a minimum height of 8 feet above the ground.
- ~~(3) Electrical Wires. All electrical wires associated with a small wind energy system, other than wires necessary to connect the wind generator to the tower wiring, the tower wiring to the disconnect junction box, and the grounding wires shall be located underground.~~
- (4) Lighting. A wind tower and generator shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration.

- (5) Appearance, Color, and Finish. The wind generator and tower shall remain painted or finished the color or finish that was originally applied by the manufacturer, unless approved in the building permit.
  - (6) Signs. All signs, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification on a wind generator, tower, building, or other structure associated with a small wind energy system visible from any public road shall be prohibited.
  - (7) Code Compliance. A small wind energy system including tower shall comply with all applicable state construction and electrical codes, and the National Electrical Code.
  - (8) Utility notification and interconnection. Small wind energy systems that connect to the electric utility shall comply with the Public Service Commission of Wisconsin's Rule 119, "Rules for Interconnecting Distributed Generation Facilities."
  - (9) Met towers shall be permitted under the same standards, permit requirements, restoration requirements, and permit procedures as a small wind energy system.
- B. A Special Exception Permit shall be required for a small wind energy system in any major subdivision, and in Shoreland, Floodplain, Forestry, Recreational, Conservancy, and Residential Zoning Districts, provided that all standard requirements of this Ordinance are met.
- insert to Section Five, after B, "Fees shall be waived if permit applications can be combined with one or more other special exception requests."**
- C. A Special Exception Permit shall be required for a small wind energy system in the St. Croix River Buffer Zone, and the St. Croix Riverway District, provided that all standard requirements of this Ordinance are met, along with the following requirements:
- (a) The small wind energy system is not within 3,000 feet of the ordinary high water mark.
  - (b) The small wind energy system has a total height of 75 feet or less.

## **SECTOIN SIX – PERMIT REQUIREMENTS**

- (1) Land Use Permit. A land use permit shall be required for the installation of a small wind energy system.
- (2) Documents: The land use application shall be accompanied by a plot plan which includes the following:
  - (a) Property lines and physical dimensions of the property
  - (b) Location, dimensions, and types of existing major structures on the property
  - (c) Location of the proposed wind system tower
  - (d) The right-of-way of any public road that is contiguous with the property;
  - (e) Any overhead utility lines;
  - (f) Wind system specifications, including manufacturer and model, rotor diameter, tower height, tower type (freestanding or guyed)
  - (g) Tower foundation blueprints or drawings
  - (h) Tower blueprint or drawing
- (3) Fees. The application for a land use permit for a small wind energy system must be accompanied by the fee required for a Permitted Accessory Use.

- (4) Expiration. A permit issued pursuant to this ordinance shall expire if:
  - (a) The small wind energy system is not installed and functioning within 24-months from the date the permit is issued; or,
  - (b) The small wind energy system is out of service or otherwise unused for a continuous 12-month period.

#### **SECTION SEVEN - ABANDONMENT**

- (1) A small wind energy system that is out-of-service for a continuous 12-month period will be deemed to have been abandoned. The Administrator may issue a Notice of Abandonment to the owner of a small wind energy system that is deemed to have been abandoned. The Owner shall have the right to respond to the Notice of Abandonment within 30 days from Notice receipt date. The Administrator shall withdraw the Notice of Abandonment and notify the owner that the Notice has been withdrawn if the owner provides information that demonstrates the small wind energy system has not been abandoned.
- (2) If the small wind energy system is determined to be abandoned, the owner of a small wind energy system shall remove the wind generator from the tower at the Owner's sole expense within 3 months of receipt of Notice of Abandonment. If the owner fails to remove the wind generator from the tower, the Administrator may pursue a legal action to have the wind generator removed at the Owner's expense.

#### **SECTION EIGHT - VIOLATIONS**

It is unlawful for any person to construct, install, or operate a small wind energy system that is not in compliance with this ordinance or with any condition contained in a building permit issued pursuant to this ordinance. Small wind energy systems installed prior to the adoption of this ordinance are exempt.

#### **SECTION NINE - ADMINISTRATION AND ENFORCEMENT**

- (1) This ordinance shall be administered by the Administrator or other official as designated.
- (2) The Administrator may enter any property for which a building permit has been issued under this ordinance to conduct an inspection to determine whether the conditions stated in the permit have been met.
- (3) The Administrator may issue orders to abate any violation of this ordinance.
- (4) The Administrator may issue a citation for any violation of this ordinance.
- (5) The Administrator may refer any violation of this ordinance to legal counsel for enforcement.

#### **SECTION TEN - PENALTIES**

- (1) Any person who fails to comply with any provision of this ordinance or a land use permit issued pursuant to this ordinance shall be subject to enforcement and penalties as stipulated in Ordinance 79-06.
- (2) Nothing in this section shall be construed to prevent the Polk County Land Information Committee from using any other lawful means to enforce this ordinance.

**SECTION TWELVE – SEVERABILITY**

The provisions of this ordinance are severable, and the invalidity of any section, subdivision, paragraph, or other part of this ordinance shall not affect the validity or effectiveness of the remainder of the ordinance.

Funding Amount *N/A*

Funding Source *N/A*

Date Finance Committee Advised *N/A*

Effective Date: Upon passage and publication

Approved as to form:

*Jeffrey B. Sage*  
Corporation Counsel

Date Submitted to County Board March 18<sup>th</sup>, 2008

SUBMITTED BY:

*[Signature]*  
*[Signature]*  
*[Signature]*  
*[Signature]*

The above ordinance was adopted <sup>as amended.</sup> on the 11<sup>th</sup> day of March 2008 by the County Board of Supervisors of Polk County. (if necessary, note the vote on the resolution).

*[Signature]*  
Larry Jepsen, Polk County Board Chairperson

Date: 3/14/08

Attest: *[Signature]*  
Cathy Albrecht, Polk County County Clerk

Date: 3/11/08

Certification of Publication

The above ordinance was published in the legal newspaper on the 26<sup>th</sup> day of March, 2008

*[Signature]*  
, Polk County County Clerk

Date: 3/17/08