ORDINANCE NO. __________
TOWN OF UNION
ROCK COUNTY, WISCONSIN

SMALL WIND ENERGY SYSTEM ORDINANCE

1. The Plan Commission has recommended and the Town Board has determined that the Town should regulate the construction of small wind energy systems to protect public safety.

2. The Plan Commission conducted a public hearing on this Ordinance, preceded by publication of a Class 2 notice, on November 29, 2007, and the Town Board conducted a public hearing on this Ordinance, preceded by publication of a Class 2 notice, on ________________.

NOW THEREFORE, based on the above and pursuant to section 60.61 of the Wisconsin Statutes, the Town Board of the Town of Union, Rock County, Wisconsin, does hereby ordain as follows:

SECTION 1. Sections 17.19 through 17.26 of the Town of Union Code of Ordinances are renumbered sections 17.20 through 17.27.

SECTION 2. New Section 17.19 of the Town of Union Code of Ordinances is created as set forth in the attached Exhibit A.

SECTION 3. Except as expressly stated herein, this ordinance does not abrogate, annul, impair, interfere with or repeal any existing ordinance.

SECTION 4. If any section or part of this Ordinance is adjudged to be unconstitutional, unlawful, or invalid by a court of competent jurisdiction, the remainder of the Ordinance shall not be affected thereby.

SECTION 5. Effective Date. This Ordinance shall become effective upon adoption and publication or posting, as provided by law.
The above and foregoing Ordinance was duly adopted by the Town Board of the Town of Union at a regular meeting held on ________________, _____ by a vote of ___ in favor, ___ opposed and ___ not voting.

TOWN OF UNION

By ____________________________
Kendall Schneider, Town Chair

By ____________________________
Regina Ylvisaker, Town Clerk

Approved:____________________
Posted:____________________
Published:__________________
EXHIBIT A

Section 17.19 SMALL WIND ENERGY SYSTEM ORDINANCE

(1) Title
This section may be referred to as the Small Wind Energy System Ordinance.

(2) Authority
This section is adopted pursuant to authority granted by Wis. Stat. § 60.61, and in accordance with Wis. Stat. § 66.0401.

(3) Purpose
The purpose of this section is to establish regulations for small wind energy systems in order to preserve and protect the public health and safety.

(4) Applicability
This section applies to all lands within the boundaries of the Town of Union.

(5) Definitions
In this section:

A. "Met tower" means a meteorological tower, including any anchor, base, base plate, boom, cable, electrical or electronic equipment, guy wire, hardware, indicator, instrument, telemetry device, vane, or wiring, that is used to collect or transmit meteorological data, including wind speed and wind flow information, in order to monitor or characterize wind resources at or near a small wind energy system.

B. "Owner" means the person that owns a small wind energy system or met tower.

C. "Rotor Diameter" means the cross sectional dimension of the circle swept by the rotating blades.

D. "Small wind energy system" means a wind energy system that has a nameplate capacity of 100 kilowatts or less, has a total height of 170 feet or less, and is primarily used to generate energy for use by its owner.

E. "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.

F. "Tower" means either the freestanding, guyed, or monopole structure that supports a wind generator or the freestanding, guyed, or monopole structure that is used as a met tower.

G. "Wind energy system" means equipment that converts and then stores or transfers energy from the wind into usable forms of energy and includes any base, blade, foundation, anchor, generator, nacelle, rotor, tower, transformer, turbine, vane, wire, or other component used in the system.

H. "Wind generator" means the mechanical and electrical conversion components mounted at the top of a tower in a wind energy system.
Standards – Small Wind Energy System

A small wind energy system is a permitted use in any district subject to the following requirements:

A. **Set backs.** No part of a wind energy system shall be located closer than 5 feet from any property line. A wind tower for a small wind energy system must be set back as measured from the center of the base of the tower, as follows:

   i. A distance equal to 1.1 times its total height from any public road right of way.

   ii. A distance equal to 1.1 times its total height from any overhead utility lines.

   iii. A distance equal to 1.1 times its total height from all property lines.

B. **Sound.** The noise generated by the operation of a small wind energy system may not exceed 5 dB(A) over ambient sound level as measured at any point on property adjacent to the parcel on which the small wind energy system is located. The sound level generated by the operation of a small wind energy system will be determined during the investigation of a complaint by comparing the sound level measured when the wind generator blades are rotating to the sound level measured when the wind generator blades are stopped. Measurements will be made by a Type 2 sound meter that is in compliance with ANSA Standard S 1.14-1983.

C. **Blade Clearance.** The vertical distance from ground level to the tip of a wind generator blade when the blade is at its lowest point must be at least 30 feet.

D. **Access.** All ground-mounted electrical and control equipment must be labeled and secured to prevent unauthorized access. A tower may not have step bolts or a ladder within 12 feet of the ground that is readily accessible to the public. All access doors to towers and equipments shall be locked when not in use.

E. **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, must be located underground.

F. **Lighting.** A wind tower and generator may be artificially lighted only if lighting is required by the Federal Aviation Administration.

G. **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. (changed from "neutral color" to "manufacturer's original color and finish").

H. **Signs.** No sign other than a warning sign, or an installer, owner, or manufacturer identification sign, may be placed on any component of a small wind energy system if the sign is visible from a public road.
I. **Code Compliance.** A small wind energy system, including tower, shall comply with all applicable state construction and electrical codes, and the National Electrical Code.

J. **Signal Interference.** The owner of a small wind energy system or met tower must take reasonable steps to prevent and eliminate any interference with the transmission and reception of electromagnetic communications, such as microwave, radio, telephone, or television signals.

K. **Utility Interconnection.** A small wind energy system that connects to the electric utility must comply with Wis. Admin. Code § PSC 119 "Rules for Interconnecting Distributed Generation Facilities."

L. **Maintenance Log.** The owner of a small wind energy system or met tower shall keep a written maintenance log demonstrating that the system is being maintained in accordance with the manufacturer's specifications.

(7) **Met Tower**
A met tower is a permitted use in any district subject to the same standards as a small wind energy system set forth in subsection (6), except for the standards contained in subsections (6)(B) and (6)(C).

(8) **Permit Requirements**

A. **Building Permit.** A permit is required for the installation of a small wind energy system or a met tower. An application for a permit shall be submitted to the Building Inspector on a form approved by the Town. The Building Inspector may enter upon any property for which a permit has been applied to conduct any inspection needed in connection with issuing a building permit.

B. **Site Plan Review.** The permit application shall be accompanied by 3 copies of the following:

   i. A site plan prepared by a Wisconsin registered land surveyor that shows property lines and physical dimensions of the property, the location, dimensions, and types of existing major structures on the property, the location of the proposed wind system tower, the Location of any overhead utility lines on or adjacent to the property, and the right-of-way of any public road that is contiguous to the property.

   ii. A description of the small wind energy system or met tower prepared by a Wisconsin professional engineer, which shall include a design of the foundation based upon an on-site geotechnical investigation, a design of the tower structure, and the specifications of the components including the manufacturer, model, capacity, blade length, rotor diameter, and height.

   iii. A statement from the applicant that all wind energy system(s) will be installed in compliance with manufacturer's specifications, and a copy of those manufacturer's specifications.
C. Fees
The application for a permit for a small wind energy system must be accompanied by a fee in an amount to be set by the Town Board by resolution.

D. Review and Issuance or Denial. The Building Inspector shall have 45 days after receipt of a complete permit application and all materials required by this section to review and act on the permit. A permit shall be issued if the application and related materials show that the proposed small wind energy system meets the requirements of this section. If the application is not approved, the Building Inspector shall notify the applicant in writing of the reasons for denial.

E. Posting and Expiration. A permit issued pursuant to this ordinance shall be posted conspicuously on the premises at all times during construction, and shall expire if the small wind energy system or met tower is not installed and functioning within 12 months from the date the permit is issued.

F. Construction Inspection. During and upon completion of construction of a small wind energy system or met tower, the Owner shall arrange for the Building Inspector to inspect the foundation to determine whether it has been constructed in accordance with the professional engineer’s design. The Owner shall also provide the Building Inspector with a certification from the manufacturer or a structural engineer that the tower has been constructed in accordance with the manufacturer’s specifications. If the Building Inspector determines that the foundation or tower were not properly constructed, the Owner shall take whatever steps are necessary to correct any deficiencies.

(9) Abandonment

A. A small wind energy system or met tower that is out of service for a continuous 12-month period will be deemed to have been abandoned. The Building Inspector may issue a Notice of Abandonment to the owner of the small wind energy system or met tower that it is deemed to have been abandoned. The owner shall have the right to respond to the Notice of Abandonment within 30 days from the Notice date. The Building Inspector 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 or met tower has not been abandoned.

B. If the small wind energy system or met tower is determined to be abandoned, the small wind energy system or met tower must be removed within 90 days of the Notice of Abandonment and the site must be reclaimed, including removal of subsurface foundation, electrical or other materials. If the owner fails to remove a small wind energy system or met tower and reclaim the site, the Town may remove or cause the removal of the small wind energy system or met tower and the reclamation of the site. The cost of removal and reclamation will be assessed as a special charge against and shall become a lien upon the property and may be collected in the same manner as property taxes.

(10) Violations
It is unlawful for any person to construct, install, or operate a small wind energy system or met tower without a permit, or that is not in compliance with this section or with any
condition contained in a permit issued pursuant to this section. A small wind energy system or met tower that was installed prior to the effective date of this section is exempt from the requirements of this section.

(11) **Enforcement**
A. The Building Inspector may enter any property for which a permit has been issued under this section to conduct an inspection to determine whether there is any violation of this section or whether the conditions stated in the permit have been met.

B. The Building Inspector may issue an order to abate any violation of this section.

C. The Building Inspector may issue a citation for any violation of this section.

D. The Building Inspector may refer a violation of this section to legal counsel for legal action.

(12) **Penalties**
A. Any person who fails to comply with or violates any provision of this ordinance or a building permit or order issued pursuant to this section shall, upon conviction thereof, forfeit not less than $50.00 nor more than $500.00. Each day a violation exists or continues shall constitute a separate offense.

B. Nothing in this section shall be construed to prevent the Town Board from using any other lawful means to enforce this section.