



Meeting Date: 3/28/2011

Agenda Item: #5f (ii)

**Mission Statement**

Delivering quality services in a courteous, cost-effective and efficient manner.

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## VILLAGE BOARD STAFF REPORT

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**REPORT TO:** Burt R. McIntyre, President, and Village Board members

**REPORT FROM:** Dave Wiese, Executive Director of Community Development

**AGENDA ITEM:** #5f (ii) Review and take action on Ordinance 2011-8, establishing the regulation of Wind Turbines.

**ACTION REQUESTED:**  Ordinance       Resolution       Motion       Receive/File

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### **RECOMMENDED ACTION**

The Plan Commission unanimously recommended approval of the proposed ordinance.

### **POLICY ALTERNATIVE(S)**

The Village Board could take any of the following actions:

- Approve the Ordinance as-is.
- Approve the ordinance with changes.
- Table the proposed ordinance until a later date.

### **BACKGROUND**

**Trustee Steffen requested this item be addressed by the Plan Commission. There have been discussions by the Governor's office regarding changes to the PSC wind siting rules.**

The Public Service Commission of Wisconsin (Commission) finished its work on administrative rules governing the siting of wind turbines in Wisconsin <http://psc.wi.gov/mediaRoom/documents/windSitingRules.pdf>.

The rules were drafted in response to 2009 Wisconsin Act 40, recently enacted legislation directing the Commission to promulgate rules that specify the restrictions local units of government may impose on the installation or use of wind energy systems.

The Public Service Commission and the State of Wisconsin have broken down the turbines into two categories: wind turbine projects 100 MW or larger (in total) and wind turbine projects 1 MW to less than 100 MW (in total)

**1. Wind Turbine Projects 100 MW or larger (in total):**

Wind energy projects 100 megawatts (MW) or larger (in total) are reviewed and approved through the Wisconsin Public Service Commission (PSC) pursuant to Wisconsin Statute 196.491(2). Local zoning authority is preempted by this standard of greater than 100 MW.

**2. Wind Turbine Projects 1 MW to less than 100 MW (in total):**

Pursuant to Wisconsin Act 40, projects less than 100 MW are handled through issuance of a conditional-use permit under a local unit of government's general purpose (land use) zoning ordinance. Act 40 requires the PSC to convene a committee to determine statewide wind energy siting criteria for all wind energy

projects 1 MW to less than 100 MW. Approval (conditional-use permit) will still need to be obtained from a unit of government with local general purpose zoning ordinance (the town, village, or city). Local units of government cannot apply conditions on a wind turbine conditional-use permit that are any stricter than PSC approved rules. Appeals to local unit of government board action on wind energy conditional-use permit applications go to PSC for review and action.

The rules specify how a political subdivision can establish setback requirements, noise and shadow flicker standards, and mechanisms that give non-participating landowners a stake in wind energy projects sited in their area. The rules include the following provisions:

- **Notice Requirements.** At least 90 days before filing an application, the wind energy system owner must give notice to landowners within one mile of proposed wind turbine locations.
- **Noise Performance Standards.** A political subdivision can require wind energy systems to be sited and operated in a manner that does not exceed 45 dBA during nighttime hours and 50 dBA during daytime hours. Noise limits will be measured from the outside wall of non-participating residences and occupied community buildings.
- **Shadow Flicker Performance Standards.** A political subdivision can require wind energy systems to be sited and operated in a manner that does not cause more than 30 hours per year of shadow flicker for non-participating residences or occupied community buildings. If a wind energy system causes more than 20 hours per year of shadow flicker, a political subdivision can require the wind energy system owner to install mitigation measures for affected landowners, at the expense of the wind turbine owner.
- **Setbacks.** A political subdivision can impose minimum safety setbacks of 1.1 times the maximum blade tip height of a wind turbine for participating residences, non-participating property lines, public road rights-of-way, and overhead communication and electric transmission or distribution lines. Setbacks of up to 3.1 times the maximum blade tip height of a wind turbine may be established for nonparticipating residences and occupied community buildings.
- **Good Neighbor Payments.** The rules allow local units of government to require wind energy system owners to provide monetary compensation to non-participating landowners located within one-half mile of a wind turbine site. A political subdivision may not require these payments for non-participating landowners to exceed 25% of the payments being made to a landowner hosting a wind turbine in the project.

## Attachments

I Ordinance 2011-8

**ATTACHMENT I**

**ORDINANCE NO. 2011-8**

**AN ORDINANCE CREATING ARTICLE V, DIVISION 14 OF THE ZONING ORDINANCE PERTAINING TO THE REGULATION OF SMALL WIND ENERGY SYSTEMS**

**WHEREAS** the Village Clerk published a notice of public hearing regarding such proposed amendment to the Zoning Ordinance and a public hearing was held at the Village Hall on March 21, 2011 at 6:40 P.M., whereupon the Plan Commission heard all interested persons and/or their agents and attorneys; and

**WHEREAS** the Village Board of the Village of Howard has received a written recommendation and findings of the Village Plan Commission regarding such proposed amendment to the Zoning Ordinance;

**NOW THEREFORE** the Village Board of the Village of Howard, Brown County, Wisconsin, does hereby ordain that the Zoning Ordinance be amended as follows:

**SECTION 1** Article V, Division 14 is hereby created to read as follows:

**DIVISION 14 – SMALL WIND ENERGY SYSTEMS**

**50-1195 – Authority**

This ordinance is adopted pursuant to authority granted by Wisconsin State Statutes 62.23(7) and 66.0401.

**50-1196 – Purpose**

The purpose of this ordinance is to:

- (1) Oversee the permitting of small wind energy 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).

**50-1197 – Definitions**

The following words, terms and phrases, when used in this division, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

*“Administrator”* means the Village of Howard Director of Code Administration.

*“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.

“Owner” shall mean the individual or entity that intends to own and operate the small wind energy system in accordance with this ordinance.

“Rotor Diameter” means the cross sectional dimension of the circle swept by the rotating blades.

“Small Wind Energy System” means a wind energy system that:

- (1) is used to generate electricity;
- (2) has a nameplate capacity of 100 kilowatts or less; and
- (3) has a total height of 170 feet or less.

“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.

“Tower” means the monopole, freestanding, or guyed structure that supports a wind generator.

“Village Board” means the Village of Howard Board of Trustees.

“Wind Energy System” means the equipment that converts and then stores or transfers energy from the wind into usable forms of energy (as defined by Wis. Stats. §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.

“Wind Generator” means blades and associated mechanical and electrical conversion components mounted on top of the tower.

## 50-1198 – Standards

A small wind energy system shall be a conditional use in all zoning districts subject to the following requirements:

- (1) *Setbacks.* A tower for a small wind energy system shall be set back a distance equal to the total height of the system from:
  - a. Any public road right of way, unless permission is granted by the governmental entity with jurisdiction over the road. Such permission shall be in a form acceptable for recording in the county Register of Deeds office for the parcel on which the tower is located.
  - b. Any overhead utility lines, unless permission is granted by the affected utility, such permission shall be in a form acceptable for recording in the county Register of Deeds office for the parcel on which the tower is located.
  - c. All property lines, unless permission is granted from the affected land owner or neighbor, such permission shall be in a form acceptable for recording in the county Register of Deeds office for the parcel on which the tower is located.
- (2) *Access.*
  - a. All ground mounted electrical and control equipment shall be labeled and 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.* Met towers shall be permitted under the same standards, permit requirements, restoration requirements, and permit procedures as a small wind energy system.
- (10) *Visual Impact.* Small wind energy systems shall be sited and sized in a manner to minimize visual impact to principal view corridors of adjoining properties. The Plan Commission may require the structure to be located outside of said principal view corridors. Principal view corridors shall be those views from primary living areas of the principal structure on a non-participating lot.

## 50-1199 – Permit Requirements

The following permit requirements shall apply to all small wind energy systems:

- (1) *Building Permit.* A building permit shall be required for the installation of a small wind energy system.
- (2) *Documents.* The building permit 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 stamped by a design professional.
  - h. Tower blueprint or drawing stamped by a design professional.
  - i. The property lines and dimensions, with the names and addresses of the owners, of any properties proposed to be restricted from activities interfering with the system.
- (3) *Fees.* The same fee required for a building permit for a Permitted Accessory Use must accompany the application for a building permit for a small wind energy system.

- (4) *Expiration.* A permit issued pursuant to this ordinance shall expire if the small wind energy system is not installed and functioning within 2 years from the date the permit is issued.

#### **50-1200 – Abandonment**

- (1) A small wind energy system that is out-of-service for a continuous two-year period, excluding time spent on repairs or improvements, 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 the 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 three 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 and special charge on the tax roll.

#### **50-1201 – Building Permit Procedures**

- (1) An owner shall submit an application to the Administrator for a building permit for a small wind energy system. The application must be on a form approved by the Administrator and must be accompanied by two copies of the plot plan identified above.
- (2) Within thirty (30) days of receipt of an application, the Administrator shall determine whether the application is satisfactorily completed and, if no other properties are to be restricted by the permit, place the application on the agenda before the Village Plan Commission. If the application identifies other properties to be restricted by the permit, the applicant shall provide notice to the owners of those properties personally or by certified mail; and, provide receipts for the delivery of such notice to the Administrator. The Administrator shall provide the notice form. The hearing before the Village Plan Commission shall, in such cases, be scheduled in compliance with the timelines of Wis. Stats. 66.0403(3)and(4). Following such public hearing, the Plan Commission shall make written findings of fact on the proposed conditional use and shall submit such findings, together with its recommendation for approval or disapproval, to the Village Board. Such recommendation shall include any stipulations, conditions or guarantees deemed necessary by the Plan Commission for the protection of the public interest
- (3) If the conditional use is approved by the Village Board, the Administrator shall issue a building permit and return one signed copy of the application to the applicant.
- (4) If the conditional use is rejected by the Village Board, the Administrator shall notify the applicant of the reason why the application was rejected.
- (5) The owner shall conspicuously post the building permit on the premises so as to be visible to the public at all times until construction or installation of the small wind energy system is complete.

#### **50-1202 – 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 and operated prior to the adoption of this ordinance are exempt.

**50-1203 - Administration and Enforcement**

- (1) This ordinance shall be administered by the Administrator or other designated official.
- (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.

**50-1204 - Penalties**

- (1) 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 as provided in Chapter 1, Section 1-16 of the Howard Small wind Municipal Code.
- (2) Nothing in this section shall be construed to prevent the Village Board from using any other lawful means to enforce this ordinance.

**50-1205 – 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.

**SECTION 2** All ordinances, or parts of ordinances, in conflict herewith are hereby repealed.

**SECTION 3** This ordinance shall take effect upon its adoption and publication.

Approved and adopted this 28th day of March, 2011.

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Burt McIntyre, Village President

ATTEST:

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Robert Bartelt, Administrator/Clerk

DATE OF PUBLICATION: 4/1/2011