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Wind Energy Conversion System Ordinance of Grant County

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The County Board of Commissioners of Grant County, Minnesota ordains:

I. General Provisions

A. Title

This ordinance from the date of its passage shall be known as the Wind Energy Conversion Systems Ordinance of Grant County, Minnesota.

B. Purpose

This ordinance is established to regulate the installation and operation of Wind Energy Conversion Systems (WECS) within Grant County not otherwise subject to siting and oversight by the State of Minnesota under the Minnesota Power Plant Siting Act (MS 216E.01-216E.18) and/or the Wind Energy Conversion System Act (MS 216F.01-216F.09)

C. Statutory Authorization

This ordinance is adopted pursuant to the authorization and policies contained in Minnesota Statutes Chapter 394.

D. Legal Authority/Jurisdiction

The provisions of this ordinance shall apply to the unincorporated areas of Grant County lying outside the incorporated areas of a city.

E. Compliance

The use of any land for wind energy development shall be in full compliance with the terms of this ordinance and any other applicable regulations.

F. Enforcement

The Zoning Administrator is responsible for the administration and enforcement of this ordinance. Any violation of the provisions of this ordinance or failure to comply with any of its requirements (including violations of conditions and conditional uses) shall constitute a misdemeanor and shall be punishable as defined by law. Violations of this ordinance can occur regardless of whether or not a permit is required for regulated activity pursuant to the Section of Administration of this ordinance.

G. Interpretation

In their interpretation and application, the provisions of the ordinance shall be held to be the minimum requirements and shall be liberally construed in favor of the governing body and shall not be deemed a limitation or repeal of any other powers granted by State Statutes.

H. Savings Clause/Severability

All permits issued under this ordinance are permissive only and shall not release the permittee from any liability or obligation imposed by Minnesota Statutes, Federal Law,

or local ordinances relating thereto. In the event any section, clause, portion or provision of this ordinance shall be found contrary to law by a court of competent jurisdiction from whose final judgment no appeal has been taken, such provision shall be considered void. All other provisions of this ordinance shall continue in full force and effect as though the voided provision had never existed.

I. Abrogation and Greater Restrictions

It is not intended by this ordinance to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance imposes greater restrictions, the provisions of this ordinance shall prevail. All other ordinances inconsistent with this ordinance are hereby repealed to the extent of the inconsistency only.

J. Owner Liable

In addition to any other person or persons involved in a violation or threatened violation of this ordinance, the owner of record of any property falling under the jurisdiction of this ordinance shall be responsible both criminally and civilly for any construction, alteration, excavation, or any other activity occurring upon his property which is contrary to the provisions of this ordinance.

II. Definitions

1. WECS - Wind Energy Conversion System: An electrical generating facility comprised of one or more wind turbines and accessory facilities, including but not limited to: power lines, transformers, substations and metrological towers that operate by converting the kinetic energy of wind into electrical energy. The energy maybe used on-site or distributed into the electrical grid.

2. Aggregated Project: Aggregated projects are those which are developed and operated in a coordinated fashion, but which have multiple entities separately owning one or more of the individual WECS within the larger project. Associated infrastructure such as power lines and transformers that service the facility may be owned by a separate entity but are also included as part of the aggregated project.

3. Commercial WECS: A WECS of equal to or greater than 100 kW in total name plate generating capacity.

4. Non-Commercial WECS: A WECS of less than 100 kW in total name plate generating Capacity.

5. Fall Zone: The area, defined as the furthest distance from the tower base, in which a guyed tower will collapse in the event of a structural failure. This area is less than the total height of the structure.

6. Feeder Line: Any power line that carries electrical power from one or more wind turbines or individual transformers associated with individual wind turbines to the point of interconnection with the electric power grid, in the case of interconnection with the high voltage transmission systems the point of interconnection shall be the substations serving the WECS.

7. Meteorological Tower: For the purposes of this Wind Energy Conversation System Ordinance, meteorological towers are those towers which are erected primarily to measure wind speed and directions plus other data relevant to siting WECS. Meteorological towers do not include towers and equipment used by airports, the Minnesota Department of Transportation, or other similar applications to monitor weather conditions.

8. Micro-WECS: Micro-WECS are WECS of 1 kW nameplate generating capacity or less and utilizing supporting towers of 40 feet or less.

9. Nonconformity: Any legal use, structure or parcel, of land established before the effective date of this ordinance, which does not conform to use restrictions of a particular zoning district.

10. Property line: The boundary line of the area over which the entity applying for a WECS permit has legal control for the purposes of installation of a WECS. This control may be attained through fee title ownership, easement, or other appropriate contractual relationship between the project developer and landowner.

11. Rotor diameter: The diameter of the circle described by the moving rotor blades.

12. Substations: Any electrical facility designed to convert electricity produced by wind turbines to a voltage greater than 35,000 (35 KV) for interconnection with high voltage transmission lines shall be located outside of the road right of way.

13. Total height: The highest point, above ground level, reached by a rotor tip or any other part of the WECS.

14. Tower: Towers include vertical structures that support the electrical generator, rotor blades, or meteorological equipment.

15. Tower height: The total height of the WECS exclusive of the rotor blades.

16. Transmission Line: Those electrical power lines that carry voltages of at least 41,600 volts (41.6 KV) and are primarily used to carry electric energy over medium to long

distances rather than directly interconnecting and supplying electric energy to retail customers.

17. Public Conservation Lands: Land owned in fee title by State or Federal agencies and managed specifically for conservation purposes, including but not limited to State Wildlife Management Areas, State Parks, State Scientific and Natural Areas, Federal Wildlife Refuges and Waterfowl Production Areas. For the purposes of this section public conservation lands will also include lands owned in fee title by non-profit conservation organizations. Public conservation lands do not include private lands upon which conservation easements have been sold to public agencies or non-profit conservation organizations.

18. Wind Turbine: A wind turbine is any piece of electrical generating equipment that converts the kinetic energy of blowing wind into electrical energy through the use of airfoils or similar devices to capture the wind.

III. Procedures

Site Permits, Conditional Use Permits and Variances shall be applied for and reviewed under the appropriate procedures established within the County's Shoreland Management Ordinance, except where noted below.

1. The application for all WECS shall include the following information:
 - a. The names of project applicant
 - b. The name of the project owner
 - c. The legal description and address of the project.
 - d. A description of the project including: Number, type, name plate generating capacity, tower height, rotor diameter, and total height of all wind turbines and means of interconnecting with the electrical grid.
 - e. Site layout, including the location of property lines, wind turbines, electrical wires, interconnection points with the electrical grid, and all related accessory structures. The site layout shall include distances and be drawn to scale.
 - f. Engineer's certification
 - g. Documentation of land ownership or legal control of the property
2. The application for Commercial WECS shall also include:
 - a. The latitude and longitude of individual wind turbines.
 - b. A USGS topographical map, or map with similar data, of the property and surrounding area, including any other WECS within 10 rotor diameters of the Proposed WECS.
 - c. Location of wetlands, scenic, and natural areas [including bluffs] within 1,320 feet of the proposed WECS.

- d. FAA Permit Application
- e. Location of all known Communications Towers within 2 miles of the proposed WECS.
- f. Decommissioning Plan
- g. Description of potential impacts on nearby WECS and wind resources on adjacent properties.

IV. Aggregated Projects

Aggregated Projects of less than 5 MW may jointly submit a single application and be reviewed under joint proceedings, including notices, hearings, reviews and as appropriate approvals. Permits will be issued and recorded separately. Joint applications will be assessed fees as one project.

V. District Regulations

- P= Permitted Use
- C= Conditional Use
- N= Prohibited Use

District

| | Non-Commercial | Commercial |
|--------------------------|----------------|------------|
| Shoreland | | |
| General Development | N | N |
| Recreational Development | N | N |
| Natural Environment | C | N |
| Non Shoreland | P | C |

VI. Setbacks; Wind Turbines

Type

| | Non-commercial | Commercial |
|---------------------------------|----------------------------|----------------------------|
| Family Residences | 1.1 X total height (1) | 750' (1) |
| Property Line | 1.1 X total height (2) | 1.1 X total height (2) |
| Other Structures | 1.1 X total height | 1.1 X total height |
| Road ROW | 1 X total height | 1 X total height |
| Other ROW | 1 X total height | 1 X total height |
| Public Conservation Land | 600' | 600' |
| Wetlands, USFWS Type III, IV, V | NA | 600' |
| Other WECS | 3 or 5 rotor diameters (3) | 3 or 5 rotor diameters (3) |

(1) can be less if within same project or by special agreement.

(2) can be less or waived if within same project or by special agreement.

(3) three rotor diameters for non prevailing wind and five rotor diameters for prevailing wind.

VII. Requirements and Standards

A. Safety Design Standards

1. Engineering Certification — for all WECS, the manufacture's engineer or another qualified engineer shall certify that the turbine, foundation and tower design of the WECS is within accepted professional standards, given local soil and climate conditions.
2. Clearance — Rotor blades or airfoils must maintain at least 12 feet of clearance between their lowest point and the ground.
3. Warnings —for all Commercial WECS, a sign or signs shall be posted on the tower, transformer and substation warning of high voltage.

B. Standards

1. Total height —Non-Commercial WECS shall have a total height of less than 200 feet.
2. Tower configuration — all wind turbines, which are part of a commercial WECS, shall be installed with a tubular, monopole type tower.
3. Color and Finish — all wind turbines and towers that are part of a commercial WECS shall be white, grey or another non-obtrusive color. Blades may be black in order to facilitate deicing. Finishes shall be matt or non-reflective.
4. Lighting — lighting, including lighting intensity and frequency of strobe, shall adhere to but not exceed requirements established by Federal Aviation Administration permits and regulations. Red strobe lights are preferred for night-time illumination to reduce impacts on migrating birds. Red pulsating incandescent lights should be avoided.
5. Other Signage —the manufacturer's or owner's company name and/or logo may be placed upon the nacelle, compartment containing the electrical generator, of the WECS.
6. Feeder Lines — all communications and feeder lines, equal to or less than 34.5 kV in capacity, installed as part of a WECS shall be buried where reasonably feasible. Feeder lines installed as part of a WECS shall not be considered an essential service.

7. Waste Disposal — Solid and Hazardous wastes, including but not limited to crates, packaging materials, damaged or worn parts, as well as used oils and lubricants, shall be removed from the site promptly and disposed of in accordance with all applicable local, state and federal regulations.

8. Discontinuation and Decommissioning - A WECS shall be considered a discontinued use after 1 year without energy production, unless a plan is developed and submitted to the County Zoning Administrator outlining the steps and schedule for returning the WECS to service. All WECS and accessory facilities shall be removed to four feet below ground level and within 90 days of the discontinuation of use.

Each Commercial WECS shall have a Decommissioning plan outlining the anticipated means and cost of removing WECS at the end of their serviceable life or upon becoming a discontinued use. The cost estimates shall be made by a competent party; such as a Professional Engineer, a contractor capable of decommissioning or a person with suitable expertise or experience with decommissioning. The plan shall also identify the financial resources that will be available to pay for the decommissioning and removal of the WECS and accessory facilities.

9. Orderly Development — upon issuance of a conditional use permit, all Commercial WECS shall notify the Environmental Quality Board Staff of the project location and details on forms specified by the Environmental Quality Board.

10. Noise — All WECS shall comply with Minnesota Rules 7030 governing noise.

11. Electrical codes and standards — All WECS and accessory equipment and facilities shall comply with the National Electrical Code and other applicable standards.

12. Federal Aviation Administration— All WECS shall comply with FAA standards and permits.

13. Interference — the applicant shall minimize or mitigate interference with electromagnetic communications, such as radio, telephone, microwaves, or television signals cause by any WECS. The applicant shall notify all communication tower operators within two miles of the proposed WECS location upon application to the county for permits. No WECS shall be constructed so as to interfere with County or Minnesota Department of Transportation microwave transmissions.

C. Avoidance and Mitigation of Damages to Public Infrastructure

1. Roads — Applicants shall:

Identify all county, city or township roads to be used for the purpose of transporting WECS, substation parts, cement, and/or equipment for construction, operation or maintenance of the WECS and obtain applicable weight and size permits from the impacted road authority(ies) prior to construction.

Conduct a pre-construction survey, in coordination with the impacted local road authority(ies) to determine existing road conditions. The survey shall include photographs and a written agreement to document the condition of the public facility.

Be responsible for restoring or paying damages as agreed to by the applicable road authority(ies) sufficient to restore the road(s) and bridges to preconstruction conditions.

2. Drainage System — The Applicant shall be responsible for immediate repair of damage to public drainage systems stemming from construction, operation or maintenance of the WECS.

D. Non-Conforming Uses

1. If a non-conforming use ceases to be used and properly maintained for a period of twelve consecutive months or is changed to a conforming use, any subsequent use shall meet the requirements of the zoning district wherein located.

2. A non-conforming use shall not be moved to any other part of its site or to another site where it would still constitute a non-conforming use.

E. Exemptions

1. A Wind Turbine or WECS may be erected, exempt from the provisions of this ordinance, provided that either construction has begun and/or all appropriate permits have been applied for prior to the effective date of this ordinance.