ROCK COUNTY PLANNING AND ZONING

Request for Conditional Use Permit

Wind Turbines

Applicant Name:	
Address:	
Phone:	
Owner Name:	
Address:	
Phone:	
Application is hereby made for a conditional use permit for t	he following:
Legal Description of the Property:	
Property Currently Zoned:	
Applicant shall provide all information needed to grant the cattach exhibits as necessary.	conditional use permit. Please
If the conditional permit is granted, a certified copy must be	filed with the County Recorder.
I certify that all information submitted in this application (in and correct and that I have full legal authority to apply for the	,
A mailing fee for the actual mailing costs will be charg the mailing of the public hearing notifications.	ged to the applicant prior to
Applicant Signature	Date

Application fee: \$500.00

Yearly License Renewal Fee: \$ 100.00

PERMIT APPLICATION:

A conditional use permit shall be required. An application for a conditional use and permit shall be filed with the Zoning Administrator on a form prescribed by the planning and zoning department. Desired information shall address the following categories.

- 1. <u>Compliance with Codes and Standards</u>. Any wind turbine shall be in compliance with all applicable state and federal regulatory standards including:
 - Uniform Building Code as adopted by the State of Minnesota
 - The National Electrical Code as adopted by the State of Minnesota
 - FAA requirements
 - MPCA/EPA regulations (hazardous waste, construction storm water, etc.)
- 2. <u>Certifications</u>. Equipment shall conform to applicable industry standards including the American Wind Energy Association standard for wind turbine design and related standards adopted by the American National Standards Institute (ANSI). It would be appropriate to require that the equipment manufacturer certify that the equipment is manufactured in compliance with industry standards.

Special attention shall be paid to all turbines that are experimental, used, or prototype devices. Maintenance record, inspection by qualified wind energy professional, or some other documentation of units' integrity may be requested.

A professional engineer registered in the State of Minnesota shall certify that the tower and foundation are compatible with and appropriate for the turbine to be installed and the specific soils at the site.

The County Highway Engineer shall certify placement of all under or above ground power lines, cables and other appurtenance in the public right-of-way and that such placement shall not interfere with prospective road maintenance, repair or other improvements of such right-of-way.

- 3. Overspeed Controls. All turbines to be installed shall be equipped with redundant braking systems. This includes both aerodynamic (including variable pitch) overspeed controls, and mechanical brakes. Mechanical brakes shall be operated in fail-safe mode, whereby they are engaged in the case of loss of load on the generator. Stall regulation shall not be considered a sufficient braking system for overspeed protection.
- 4. Setback Guidelines.

Object	Setback
Residence	750 feet
Project Boundary Property Line	5 x Rotor's Diameter
Public Roads (from right of way)	300 feet
Boundary line of State and County	1 mile
Parks	

Boundary line of Cities	1 mile
Other Structures	Needs to be considered

- 5. <u>Noise Standards</u>. Noise is regulated by the Minnesota Pollution Control Agency under Chapter 7030. These rules establish the maximum nighttime and daytime noise levels that effectively limit wind turbine noise to 50 dB(A) at farm residences. However, these standards may not be sufficient for the "preservation of public health and welfare" in relation to impulsive noises. Additional local limits relative to impulsive and pure tone noises may be appropriate.
- 6. <u>Decommissioning</u>. Provisions shall ensure that facilities are properly decommissioned upon end of project life or facility abandonment. Decommissioning shall include: removal of all structures and debris to a depth of 4 feet restoration of the soil; and restoration of vegetation (consistent and compatible with surrounding vegetation) shall also be required.

Provisions shall include a decommissioning plan. This plan will identify:

- (a) When and how a facility is to be decommissioned.
- (b) Estimated cost of decommissioning.
- (c) Financial resources to be used to accomplish decommissioning.

It may also be prudent to include provisions that ensure financial resources will be available for decommissioning. This may include establishing an escrow account into which the project developer/owner will deposit funds on a regular basis over the life of the project. The unit of government shall then have access to the escrow account for the explicit purpose of decommissioning. Financial provisions shall not be so onerous as to make wind power projects unfeasible.

7. Waste Management

Solid Waste

Construction of wind power facilities will lead to the generation of various types of waste: packaging, equipment parts, and litter, debris generated by site clearing. Removal of such material shall be accomplished in a timely manner. Similarly, ongoing operations and maintenance of these machines results in the generation of various waste products. This may include worn parts, and packaging for new parts. All such material shall be removed from the project site in a timely manner, and managed in an appropriate manner.

Hazardous Waste

Operation and maintenance of wind power facilities will result in the generation of some hazardous materials. This will primarily be used lubricating materials. All such material shall be removed from the site immediately and managed in a manner consistent with all appropriate rules & regulations.

8. Tower Type

All commercial installed wind turbines must utilize self-supporting, tubular towers. Such towers provide several benefits:

- a) Improved aesthetics, including intra and inter project visual consistency.
- b) Minimized impact on farming activities.
- c) Reduced potential for unauthorized climbing.
- d) Improved maintenance access increasing the total turbine operation availability.
- e) Reduced need for ancillary structures to house control equipment.

9. Signage

It is important that signage be properly controlled. Signage regulations are to be consistent with the Rock County Zoning Ordinance. It is also recommended that signs to warn of high voltage be posted at least at the entrance of facilities.

10. Aesthetics.

The following items are recommended standards to mitigate visual impacts:

- a) Coatings and Color: Non-reflective unobtrusive color. Black blades are acceptable for mitigation of icing.
- b) Signage: including anything on the tower or nacelle, shall be consistent with other county ordinance pertaining to signage.
- c) Turbine consistency: To the extent feasible, the project shall consist of turbines of similar design and size, including tower height. Further, all turbines shall rotate in the same direction. Turbines shall also be consistent in design, color, and rotational direction with nearby facilities.
- d) Lighting: Projects shall utilize minimal lighting. No tower lighting other than normal security lighting shall be permitted except as may be required by the FAA. It may be appropriate for permits to allow for some infrared lights or heat lamps to prevent icing of sensors.
- e) Intra-project power and communication lines: All power lines used to collect power form individual turbines, and all communication lines shall be buried underground. Allowances shall be provided where shallow bedrock interferes with the ability to bury underground lines.
- f) Screening: There may be critical vistas or views from public to scenic locations, which are negatively impacted by wind turbines. It may be appropriated to require landscaping materials at a scenic overlook, which screen the view of or distracts attention from the turbines in order to minimize the visual impact.

11. Public Services

Roads

If the construction is large enough or during spring restrictions, roads can sustain sever damage, therefore, spring driving restrictions shall be strictly enforced. The local unit of government may choose to require either remediation or road repair upon completion of the project. Local units are authorized to collect fees for oversized load permits.

Fire

The following permit standards shall be followed to reduce risk of fire.

- (a) Adherence to electrical codes and standards.
- (b) Removal of fuel sources, like vegetation, from immediate vicinity of electrical gear and connections.
- (c) Utilization of twistable cables on turbines.

Sewer & Water

There shall be little issue with sewer and water facilities. Any facility shall simply comply with existing septic ordinances, and state well regulations. There may not be a need for on-site staff; therefore, there may not be any need for water or sewer services.

12. Orderly and Efficient Use of the Resource

The Rock County Zoning Ordinances call for the orderly and efficient use of the wind resource. Applications shall be reviewed to ensure that the project area does not adversely impact wind development potential on adjacent lands.

Further, ordinances to keep non-compatible development from encroaching upon wind power facilities would be appropriate. New structures shall maintain the same setbacks form wind turbines as are implemented for wind turbines.

13. Other Pertinent Information.

- (a) A description of the project including number and capacity of turbines, height and diameter of turbine rotors, turbine color, and rotor direction
- (b) A site plan, detailing the location of the project area boundaries, turbines, roads, transformers, power lines, communications lines, interconnection point with transmission lines, and other ancillary facilities or structures.
- (c) Topographic map of the project site and surrounding area.
- (d) Current land use on the site and of the surrounding area.
- (e) Distance to impacted properties.
- (f) Decommissioning plan.
- (g) Engineering certification of tower and foundation design suitability for turbine and soils.
- (h) Evidence of power purchase contracts and power transmission contracts, or documentation that the power will be utilized on-site.
- (i) Evidence of control of wind easement in the entire project area.

(j) Identification and description of neighboring wind power facilities.

Section 9, Sub. 4.

No Conditional Use shall be recommended by the County Planning Commission unless said Commission shall find:

- 1. That the Conditional Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposed already permitted, nor substantially diminish and impair property values within the immediate vicinity;
- 2. That the establishment of the Conditional Use will not impede the normal and orderly development and improvement of surrounding vacant property for uses predominant in the area;
- 3. That adequate utilities, access roads, drainage and other necessary facilities have been or are being provided;
- 4. That adequate measures have been or will be taken to provide sufficient offstreet parking and loading space to serve the proposed use;
- 5. That adequate measures have been or will be taken to prevent or control offensive odors, gases, fumes, dust, noise and vibration, so that none of these will constitute a nuisance, and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result
- 6. The use or development conforms to the comprehensive Land Use Plan of the County.