ARTICLE 14 WIND ENERGY CONVERSION SYSTEMS

SECTION 1. INTRODUCTION

Subd. 1. Title
This Ordinance shall be known, cited and referred to as Freeborn County Wind Energy Siting Ordinance.

Subd. 2. Purpose
This Ordinance is adopted for the following purposes:
A. To promote the effective and efficient use of Wind Energy Conversion Systems;
B. To facilitate economic opportunities for local residents consistent with the public health, safety and general welfare;
C. To promote the supply of wind energy sources in support of Minnesota’s’ stated goals to increase the percentage of energy production coming from clean, renewable energy.

Subd. 3. Scope
A. This ordinance shall apply to a WECS with total height of up to and including 200 ft, and shall be a minimum guideline for WECS exceeding 200 ft.
B. The following WECS shall be required to obtain a conditional use permit:
   1. WECS over 200 ft in height; or
   2. WECS in installations of 4 or more towers; or
   3. New WECS access points; or
   4. WECS outside of a building site or an active agricultural site; or
   5. WECS with a combined nameplate capacity of 5000 kilowatts or greater.
C. This Ordinance shall apply to all WECS with a combined nameplate capacity of up to 25 megawatts. As per Minnesota State Statute 216F The Minnesota Public Utility Commission processes zoning applications of 25 megawatts or greater.

SECTION 2. DEFINITIONS

Subd. 1. “Applicant” means the entity or person who submits to the County, pursuant to Section 5 of this Ordinance, an application for the siting of any WECS.

Subd. 2. “Facility Abandonment” occurs when the WECS Owner or Operator intends to permanently cease operations or fails to, for a 12-month period of time: (a) pay property taxes; (b) generate electricity.

Subd. 3. “Operator” means the entity responsible for the day-to-day operation and maintenance of the WECS, including any third party subcontractors.
Subd. 4. "Owner" means the entity or entities with an equity interest in the WECS(s), including their respective successors and assigns. Owner does not mean the landowner from whom the land is leased for locating the WECS; or any person holding a security interest in the WECS(s) solely to secure an extension of credit, or a person foreclosing on such security interest provided that after foreclosure, such person seeks to sell the WECS(s) at the earliest practicable date.

Subd. 5. "Permit Application" means the application submitted by the Applicant pursuant to section 5 of this Ordinance.

Subd. 6. "Professional Engineer" means a qualified individual who is licensed as a professional engineer in the State of Minnesota.

Subd. 7. "Primary Structure" means, for each property, the structure that is occupied the majority of time on that property. Primary Structure includes structures such as residences, commercial buildings, hospitals, nursing homes, and day care facilities. Primary structure excludes structures such as hunting sheds, storage sheds, pool houses, unattached garages, and any other accessory buildings as defined in Article 2, Section 2, Subd. 1.

Subd. 8. "Wind Energy Conversion System" ("WECS") means all (but not limited to) necessary devices that, in conjunction, convert wind energy to a form of usable energy, including the rotor, nacelle, generator, WECS Tower, electrical components, WECS foundation, transformer, cabling and substation.

Subd. 9. "WECS Tower" means the support structure to which the nacelle and rotor are attached.

Subd. 10. "WECS Tower Height" means the distance from the rotor blade at its highest point to the top of the WECS foundation.

Subd. 11. "Active Agricultural Site" Means any county permitted feedlot currently in active production, or any active grain storage facility. This is the area immediately around the structures. Platted as a perimeter established within 15' around the structures.

Subd. 12. "Building Site" This is the area immediately around the structures. Platted as a perimeter established within 15' around the structures.
SECTION 3. APPLICABILITY

This Ordinance governs the siting of WECSs used for the generation of electricity to be sold to electricity suppliers, to wholesale or retail markets, or to be used for distributed generation at commercial facilities. This Ordinance also applies to WECS installed by individual homeowners.

Setbacks

a. All WECS Towers shall be setback at least 500 feet (150 feet in a “R-1, R-2, or R-H” zone) from any Primary Structure on adjacent property. The distance for the above setback shall be measured from the point of the Primary Structure foundation closest to the WECS Tower to the center of the WECS Tower foundation. The owner of the Primary Structure on the WECS site may waive the above setback requirements; but in no case shall a WECS Tower over 90’ in height be located closer to a Primary Structure then 1.10 times the WECS Tower Height.

SECTION 4. PROHIBITION

No WECS shall be constructed, erected, installed, or located within unincorporated Freeborn County, unless siting approval has been obtained pursuant to this Ordinance by the Freeborn County Planning and Zoning Officer.

WECS shall be permitted within any R-1, R-2, or R-H zoning districts subject to a hub height limit of 100’ in a “RH” zone or 50’ in a “R-1 or R-2” zone. Towers in these zones shall be neutral colored monopole design (no guy wires) and conform to setbacks and restrictions in Article 14, Section 6, Subd.8, Subsections B, C, D, and E.

SECTION 5. PERMIT APPLICATION CONTENT

The Permit Application shall contain or be accompanied by, at a minimum, the following information:

A. A project summary, including: (1) a general description of the project, including its approximate name plate capacity; the potential equipment manufacturer(s), type(s) of WECS(s), number of WECS, and capacity of each WECS; the maximum height and diameter of the WECS rotors; the general location of the project; and (2) a description of the Applicant, Owner and Operator, including their respective business entities.
B. The name(s), address(es), and phone number(s) of the Applicant(s) and property owner(s);  

C. A description for the location of the WECS Towers and/or substations and the location of property lines of adjoining property owners;  

D. A site plan for the installation of WECS showing the location of each WECS Tower, guy lines and anchor bases (if any), Primary Structure(s), property lines, setback lines, public access roads and turnout locations, transmission lines, substations, ancillary equipment, and layout of all structures, within the geographical boundaries of any applicable setback;  

E. All required studies, reports, certifications and approvals demonstrating compliance with the provisions of this Ordinance; and  

F. Any other information normally required by the County as part of its Zoning Ordinance.  

G. Proposed site. For applications for WECS over 5000 KW.  

The applicant shall include the following information about the site proposed for the LWECS and any associated facilities:  

(1) the boundaries of the site proposed for the LWECS, which must be delineated on a United States Geological Survey Map or other map as appropriate;  

(2) the following characteristics of the wind at the proposed site:  

a. interannual variation;  
b. seasonal variation;  
c. diurnal conditions;  
d. atmospheric stability, to the extent available;  
e. turbulence, to the extent available;  
f. extreme conditions;  
g. speed frequency distribution;  
h. variation with height;  
j. spatial variations; and  
k. wind rose, in eight or more directions;  

(3) other meteorological conditions at the proposed site, including the temperature, rainfall, snowfall, and extreme weather conditions; and  

(4) the location of other wind turbines in the general area of the proposed LWECS.
H. Wind rights.

The applicant shall include in the application information describing the applicant's wind rights within the boundaries of the proposed site.

I. Environmental impacts. For applications for WECS over 5000 KW.

An applicant for a site permit shall include with the application an analysis of the potential impacts of the project, proposed mitigative measures, and any adverse environmental effects that cannot be avoided, in the following areas:

a. demographics, including people, homes, and businesses;
b. noise;
c. visual impacts;
d. public services and infrastructure;
e. cultural and archaeological impacts;
f. recreational resources;
g. public health and safety, including air traffic, electromagnetic fields, and security and traffic;
h. hazardous materials;
i. land-based economics, including agriculture, forestry, and mining;
j. tourism and community benefits;
k. topography;
l. soils;
m. geologic and groundwater resources;

No environmental assessment worksheet or environmental impact statement shall be required on a proposed LWECS project.

SECTION 6. DESIGN AND INSTALLATION

Subd. 1. Design Safety Certification

a. WECS shall conform to applicable industry standards, including or equivalent to those of the American National Standards Institute.

b. Following the granting of a zoning permit under this Ordinance, a Professional Engineer shall certify, as part of the building permit application, that the foundation and tower design of the WECS is appropriate, given local soil and climate conditions.
2. Controls and Brakes
   a. All WECS shall be equipped with a redundant braking system. This includes both aerodynamic overspeed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Stall regulation shall not be considered a sufficient braking system for overspeed protection.

3. Electrical Components
   a. All electrical components of the WECS shall conform to applicable local, state, and national codes, and appropriate national and international standards including the National Electrical Code.

4. Color
   a. Towers and blades shall be painted white or gray or another non-reflective, unobtrusive color.

5. Compliance with the Federal Aviation Administration
   a. The Applicant for the WECS shall comply with all applicable FAA requirements.

6. Warnings
   a. A visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.
   
   b. Visible, reflective, colored objects, such as flags, reflectors, or tape shall be placed on the anchor points of guy wires and along the guy wires up to a height of 15 feet from the ground.

7. Climb Prevention
   a. All WECS Towers must be unclimbable by design or protected by anti-climbing devices such as:
      1. Fences with locking portals at least eight feet high; or
      2. Anti-climbing devices 8 feet vertically from the base of the WECS Tower, or removal of any manufacturer installed climbing pegs up to eight (8) feet vertically from the base.
   
   b. Existing WECS located within the county shall be brought into compliance with Section 6, Subd. 7 within 1 year from adoption of this ordinance. Compliance date is April 23, 2005.
Subd. 8. Setbacks

a. All WECS Towers shall be setback at least 500 feet (150 feet in a “R-1, R-2, or R-H” zone) from any Primary Structure on adjacent property. The distance for the above setback shall be measured from the point of the Primary Structure foundation closest to the WECS Tower to the center of the WECS Tower foundation. The owner of the Primary Structure on the WECS site may waive the above setback requirements; but in no case shall a WECS Tower be located closer to a Primary Structure then 1.10 times the WECS Tower Height.

b. There shall be a minimum setback of thirty (30) feet from the center line of any buried public drain tile or fifty (50) feet from the top edge of an open public ditch.

c. All WECS Towers shall be setback a distance of at least 1.1 times the WECS Tower Height from public roads, transmission lines, and communication towers.

d. All WECS Towers shall be setback a distance of at least 1.0 times the WECS Tower Height from adjacent property lines. The affected adjacent property owner may waive the above setback requirements.

e. The Applicant does not need to obtain a variance from the County upon waiver of any of the above property line setback requirements, in Section 6, Subd. 8 C. only. Any waiver shall be in writing, run with the land and be recorded as part of the chain of title in the deed of the subject property by the owner.

f. All WECS are to be located in or adjacent to a building site containing the primary structure or an active agricultural site. Adjacent will be defined as at or within 1.1 times the WECS height.

h. Any WECS over 200 ft in height shall be no closer than 1000 feet from the nearest residence or within ½ mile of any municipality excluding Albert Lea.

(1) Waiver by resolution of an incorporated city may be allowed to reduce the setback to 1.1 times the tower height from the nearest residence within that municipality.

Subd. 9. Compliance with Additional Regulations

a. Nothing in this Ordinance is intended to preempt other applicable state and federal laws and regulations.
Subd. 10. Use of Public Roads
An Applicant, Owner, or Operator proposing to use any public roads located in Freeborn County, for the purpose of access to the WECS for construction, operation or maintenance, shall:

a. Identify all such public roads;

b. Obtain applicable weight and size permits from relevant government agencies prior to construction;

c. All WECS sites shall be accessed by existing access drives or trades approved by the County Engineers Office. No new access points shall be granted for WECS sites without a conditional use permit.

SECTION 7. OPERATION

Subd. 1. Maintenance
a. The Owner or Operator of the WECS shall perform annual maintenance as per manufacturer recommendations.

b. Any physical modification to the WECS that could significantly alter the basis upon which the WECS was certified for Design Safety under section 6 of the Ordinance shall require re-certification under that section.

Subd. 2. Interference
a. The Applicant shall provide the applicable microwave transmission providers and local emergency service provider(s) (911 operators) copies of the project summary and site plan, as set forth in Section 5(a) and (d) of this ordinance. To the extent that the above provider(s) demonstrate a likelihood of interference with its communications resulting from the WECS(s), the Applicant shall take reasonable measures to mitigate such anticipated interference. Section 7, Subd. 2, Subsection a, applies only to WECS over 200' in height.

b. If, after construction of the WECS, the Owner or Operator receives a written complaint related to interference with local broadcast residential television, the Owner or Operator shall take reasonable steps to respond to the complaint.

Subd. 3. Coordination with Local Fire Department
a. The Applicant, Owner or Operator shall notify the local fire department of the project plan.

b. Upon request by the local fire department, the Owner or Operator shall cooperate with the local fire department to develop the fire department’s emergency response plan.

c. Nothing in this section shall pre-empt any other applicable fire laws and regulations.
Subd. 4. Materials Handling, Storage and Disposal
   a. All solid wastes related to the construction, operation and maintenance of the WECS shall be removed from the site promptly and disposed of in accordance with all federal, state and local laws.
   b. All hazardous materials related to the construction, operation and maintenance of the WECS shall be handled, stored, transported and disposed of in accordance with all applicable local, state and federal laws.

SECTION 8. NOISE LEVELS
Noise levels from each WECS or any combination of WECS shall be in compliance with applicable Minnesota Environmental Quality Board regulations in effect at the time the permit application is submitted. The Applicant shall appropriately demonstrate compliance with the above noise requirements as part of the Permit Application process.

SECTION 9. PUBLIC PARTICIPATION
Nothing in the Ordinance is meant to augment or diminish existing opportunities for public participation.

SECTION 10. LIABILITY INSURANCE
The Owner or Operator of the WECS(s) shall maintain a current general liability policy covering bodily injury and property damage. Coverage should vary with size of installation. Minimum amount shall be $300,000. Existing WECS shall be brought into compliance with this section within 1 year from adoption of this ordinance.

SECTION 11. DECOMMISSIONING PLAN
The Permit Application must contain a Decommissioning Plan to ensure that the project is properly decommissioned upon Facility Abandonment. At a minimum, the Decommissioning Plan shall include:
   a. Provisions for the removal of all structures, debris and cabling within 180 days after Facility Abandonment;
   b. Provisions for the restoration of the soil and vegetation within 270 days after Facility Abandonment

SECTION 12. REMEDIES
   a. The Applicant’s, Owner’s, or Operator’s failure to materially comply with any part of the above ordinance shall constitute a default under this Ordinance.
   b. Prior to implementation of the existing county procedures for the resolution of such default(s), the appropriate county body shall first provide written notice to the Owner and Operator, setting forth the alleged default(s). Such written notice shall provide the Owner and Operator a reasonable time period, not to exceed 60 days, for good faith negotiations to resolve the alleged default(s).
c. If the WECS owner/operator is not in compliance at the end of the written notice time period, the WECS owner/operator shall immediately implement decommissioning as per their plan in section 11 of this ordinance.