

FORD COUNTY  
ZONING ORDINANCE

APPENDIX A  
STANDARDS FOR  
WIND ENERGY  
CONVERSION SYSTEMS

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**APPENDIX A**  
**STANDARDS FOR WIND ENERGY CONVERSION SYSTEMS**

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## **I. INTRODUCTION**

### **A. *Title***

This Ordinance shall amend the Ford County Zoning Ordinance and be known, cited and referred to as Appendix A Standards for Wind Energy Conversion System.

### **B. *Purpose***

This Ordinance is adopted for the following purposes:

1. To assure that any development and production of wind-generated electricity in Ford County is safe and effective;
2. To facilitate economic opportunities for local residents;
3. To promote the supply of wind energy in support of Illinois' statutory goal of increasing energy production from renewable energy sources.

## **II. DEFINITIONS**

- A.** "Applicant" means the entity or person who submits to the County, pursuant to Section V of this Ordinance, an application for the special use permit for any WECS.
- B.** "Financial Assurance" means reasonable assurance from a credit worthy party, examples of which include a surety bond, trust instrument, cash escrow, or irrevocable letter of credit, or corporate guaranty from an entity whose credit is investment grade (reviewed on an annual basis).
- C.** "Operator" means the entity responsible for the day-to-day operation and maintenance of the WECS, including any third party subcontractors.
- D.** "Owner" means the entity or entities with a direct equity interest in the WECS(s), including their respective successors and assigns. Owner does not mean (i) the property owner from whom land is leased for locating the WECS (unless the property owner has an equity interest in the WECS); or (ii) 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.
- E.** "Professional Engineer" means a qualified individual who is licensed as a professional engineer in any state in the United States.
- F.** "Primary Structure" means, for each property, the structure that one or more persons occupy the majority of time on that property for either business or

personal reasons. Primary Structure includes structures such as residences, commercial buildings, hospitals, churches, schools and day care facilities. Primary Structure excludes structures such as hunting sheds, storage sheds, pool houses, unattached garages and barns.

- G.** “Wind Energy Conversion System” (“WECS”) means all necessary facilities that together convert wind energy into electricity and deliver that electricity to a utility’s transmission lines, including, but not limited to, the rotor, nacelle, generator, WECS Tower, electrical components, WECS foundation, transformer, electrical cabling from the WECS Tower to the substations(s)/switchyard(s), communications facilities, transmission lines, poles, and/or towers, operations and maintenance building, and other related devices, facilities, and equipment.
- H.** “WECS Project” means the collection of WECSs as specified in the special use permit application pursuant to Section V of this Ordinance.
- I.** “WECS Tower” means the support structure to which the nacelle and rotor are attached.
- J.** “WECS Tower Hub Height” means the distance from the center of the rotor hub to the top surface of the WECS Tower foundation.
- K.** “WECS Tower Tip Height” means the distance from the rotor blade at its highest point to the top surface of the WECS foundation.

### **III. APPLICABILITY**

This Ordinance governs the special use of WECS(s) and WECS Projects that generate electricity to be sold to wholesale or retail markets and private owners of WECS(s) over 100kw who locate the WECS(s) on their own property for their own personal use.

### **IV. PROHIBITION**

No WECS or WECS Project governed by Section III of this Ordinance shall be constructed, erected, installed, or located within Ford County unless prior special use permit application has been approved for each individual WECS or WECS Project pursuant to this Ordinance. Upon special use approval a construction permit shall be obtained from the Zoning Enforcing Officer prior to the commencement of construction of any WECS or WECS Project or any part thereof.

### **V. SPECIAL USE PERMIT APPLICATION**

- A.** To obtain special use approval, the Applicant must first submit a special use permit application to the County.
- B.** The special use permit application shall contain or be accompanied by the following information:

1. A WECS Project summary, including, to the extent available: (1) a general description of the project, including its approximate name plate generating capacity; the potential equipment manufacturer(s), type(s) of WECS(s), maximum number of WECSs, and approximate name plate generating capacity of each WECS; the maximum height of the WECS Tower(s) and maximum diameter of the WECS(s) rotor(s); the general location of the project; and (2) a description of the Applicant, Owner and Operator, including their respective business structures;
  2. The name(s), address(es), and phone number(s) of the Applicant(s), Owner and Operator, and all property owner(s), if known;
  3. A site plan for the installation of WECSs showing the planned location of each WECS Tower, guy lines and anchor bases (if any), Primary Structure(s), property lines (including identification of adjoining properties), setback lines, public access roads and turnout locations, Substations(s), electrical cabling from the WECS Tower to the Substation(s), ancillary equipment, third party transmission lines, and layout of all structures within the geographical boundaries of any applicable setback;
  4. All required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance;
  5. Financial assurance that the project can be developed as proposed; and
  6. Any other information normally required by the County as part of its Zoning Ordinance.
- C. The Applicant shall notify the County of any material changes to the information provided in Section V.B. above that occur while the special use permit application is pending.

## **VI. DESIGN AND INSTALLATION**

### **A. *Design Safety Certification***

1. WECS(s) shall conform to applicable industry standards, including those of the American National Standards Institute (“ANSI”). Prior to the issuance of construction permits, Applicant shall submit certificates of design compliance that equipment manufacturers have obtained from Underwriters Laboratories (“UL”), Det Norske Veritas (“DNV”), Germanischer Lloyd Wind Energie (“GL”), or an equivalent third party. All turbines shall be new equipment commercially available; no used or experimental equipment shall be approved by the Zoning Enforcing Officer or the Zoning Board of Appeals without the issuance of a variance.

2. Following the granting of the special use permit under this Ordinance, a Professional Engineer shall certify, as part of the construction permit application that the foundation and tower design of the WECS is within accepted professional standards, given local soil and climate conditions.

**B. *Controls and Brakes***

All WECS shall be equipped with a braking system that conforms to applicable industry standards.

**C. *Electrical Components***

All electrical components of the WECS shall conform to applicable codes and standards.

**D. *Color***

WECS towers and blades shall be painted white or gray or another non-reflective, unobtrusive color.

**E. *Turbine Consistency***

To the extent feasible, the project shall consist of turbines of similar design and size, including tower height. All turbines shall rotate in the same direction.

**F. *Compliance with the Federal Aviation Administration***

The WECS shall comply with all applicable FAA requirements.

**G. *Lighting***

Projects shall utilize minimal lighting. No exterior tower lighting other than normal security lighting shall be permitted except as may be required by the FAA.

**H. *Warnings***

1. A reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and Substations.
2. 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.

**I. *Climb Prevention***

1. All WECS Towers must be unclimbable by design or protected by anti-climbing devices such as:

- a. Fences with locking portals at least six feet high; or
- b. Anti-climbing devices 12 feet vertically from the base of the WECS Tower; or
- c. Locked doors and interior ladders.

**J. *Height***

WECS Tower Tip Height shall not exceed 500 feet.

**K. *Blade Clearance***

The minimum distance between the ground and any protruding blades(s) utilized on a WECS shall be fifteen (15) feet, as measured at the lowest point of the arc of the blades.

**L. *Setbacks***

1. All WECS Towers shall be set back a distance of at least 1000 feet, from any Primary Structure in existence or which has received construction permits for construction as of the date of approval of the special use permit. Distance 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(s) of the Primary Structure may waive this setback requirement in writing; but in no case shall a WECS Tower be located closer to a Primary Structure than 1.10 times the WECS Tower Tip Height.
2. All WECS Towers shall be set back a distance of 1500 feet from the legally established boundaries, as of the date of approval of the special use permit, of any platted community which enforces its own government. Distance shall be measured from the closest Corporate Limit boundary line to the center of the WECS Tower foundation.
3. All WECS Towers shall be set back a distance of at least 1.0 times the WECS Tower Hub Height from adjacent property lines, established as of the date of approval of the special use permit, unless waived in writing by the affected adjacent property owner(s). Distance shall be measured from such adjacent property line to the center of the WECS Tower foundation.
4. All WECS Towers shall be set back a distance of at least 1.10 times the WECS Tower Tip Height from the nearest above-ground third party transmission lines, telephone lines and communication towers, in existence as of the date of approval of the special use permit, unless waived in writing by the affected property owner(s) and utility company. Distance shall be measured from the center of the WECS Tower

foundation to the closest point on such above-ground public electric power line, third party transmission line, telephone line and center of the base of the communication tower.

5. All WECS Towers shall be set back a distance of at least 1.10 times the WECS Tower Tip Height from the nearest edge of the existing right of way of public roads as of the date of approval of the special use permit. Distance shall be measured from the nearest edge of the road right of way of such public road in existence as of the date of approval of the special use permit. The Township Road Commissioner or County Highway Superintendent, or similar authorized representative with respect to local or state roadways, may waive this setback requirement as to roads within their respective jurisdictions.
6. The Applicant does not need to obtain a variance or other approval from the County upon written waiver by the applicable State, County, Township, utility company or property owner(s) of any of the above setback requirements. Any waiver of any of the above setback requirements shall run with the land and be recorded as part of the chain of title in the deed of the subject property.

**M. *Drainage Repair***

The Owner or Operator will repair waterways, drainage ditches, field tiles, or any other infrastructures damaged during construction and maintenance phases.

**N. *Compliance with Additional Regulations***

Nothing in this Ordinance is intended to preempt other applicable state and federal laws and regulations.

**O. *Use of Public Roads***

1. An Applicant, Owner, or Operator proposing to use any county, municipality, township or village road(s), for the purpose of transporting WECS or Substation parts and/or equipment for construction, operation, or maintenance of WECS(s) or Substations(s), shall, prior to the issuance of construction permits:
  - a. Identify all such public roads; and
  - b. Obtain applicable weight and size permits from relevant government agencies prior to construction.
2. To the extent an Applicant, Owner, or Operator must obtain a weight or size permit from the county, municipality, township or village, the Applicant, Owner, or Operator shall, prior to the issuance of construction permits:

- a. Conduct a pre-construction baseline survey to determine existing road conditions for assessing potential future damage; and
  - b. Secure Financial Assurance, in a reasonable amount agreed to by the relevant parties, for the purpose of repairing any damage to public roads caused by constructing, operating or maintaining the WECS.
3. Reasonable dust control measures will be required during construction of the WECS.

**P. *Term***

Notwithstanding any other provisions of the County Zoning Ordinance, a special use permit for a WECS shall be effective and may be relied upon so long as construction of the WECS is commenced within 36 months after issuance of the special use permit, which period may be extended by the Board of Appeals without further public hearing.

**VII. OPERATION**

**A. *Maintenance***

Any physical modification to the WECS that alters the mechanical load, mechanical load path, or major electrical components shall require re-certification under Section VI(A)(1) of this Ordinance. Like-kind replacements shall not require re-certification. Prior to making any physical modification (other than a like-kind replacement), the Owner or Operator shall confer with a relevant third-party certifying entity identified in Section VI(A)(1) of this Ordinance to determine whether the physical modification require re-certification.

**B. *Interference***

1. 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 V.B.1. and V.B.3. 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. If, after construction of the WECS, the Owner or Operator receives a written complaint related to the above-mentioned interference, the Owner or Operator shall take reasonable steps to respond to the complaint.
2. 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.

**C. *Coordination with Local Fire Department***

1. Prior to commencement of construction, the Applicant, Owner or Operator shall submit to the local fire department a copy of the site plan.
2. Prior to the issuance of construction permits, the Owner or Operator shall cooperate with the local fire department to develop and implement a fire protection plan in coordination with local emergency response authorities to ensure that all the appropriate emergency services agencies are cognizant of actions required in the event of a fire or other emergency at the wind power facility. In addition, the owner of the wind power facility shall provide training for, and the necessary equipment to, local emergency response authorities and their personnel so that they can properly respond to a potential emergency at the wind project.
3. Nothing in this section shall alleviate the need to comply with all other applicable fire laws and regulations.

**D. *Materials Handling, Storage and Disposal***

1. 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.
2. 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.

**VIII. NOISE LEVELS**

Noise levels from each WECS or WECS Project shall be in compliance with applicable Illinois Pollution Control Board (IPCB) regulations. The Applicant, through the use of a qualified professional, as part of the special use application process, shall appropriately demonstrate compliance with the above noise requirements.

**IX. BIRDS**

The Applicant, through the use of a qualified professional, such as an ornithologist or wildlife biologist, shall conduct an avian habitat study, as part of the special use application process, to determine if the installation of WECS(s) will have a substantial adverse impact on birds.

**X. PUBLIC PARTICIPATION**

Nothing in the Ordinance is meant to augment or diminish existing opportunities for public participation in the County's consideration of the special use application.

## **XI. LIABILITY INSURANCE AND INDEMNIFICATION**

- A.** Commencing with the issuance of construction permits, the Applicant, Owner or Operator of the WECS(s) shall maintain a current general liability policy covering bodily injury and property damage with limits of at least \$3 million per occurrence and \$5 million in the aggregate. Such insurance may be provided, pursuant to a plan of self insurance, by a party with a net worth of \$50 million or more. The County shall be named as an additional insured on the policy to the extent the County is entitled to indemnification in accordance with Section XI.B.
  
- B.** Applicant, Owner or Operators shall defend, indemnify and hold harmless the County and its officials, employees and agents (collectively and individually, the “Indemnified Parties”) from and against any and all claim, demands, losses, suits, causes of action, damages, injuries, costs, expenses and liabilities whatsoever, including reasonable attorney’s fees, except to the extent arising in whole or in part out of the negligence or intentional acts of such Indemnified Parties (such liabilities together known as “liability”) arising out of Applicant, Owner or Operators selection, construction, operation and removal of the WECS and affiliated equipment including, without limitation, liability for property damage or personal injury (including death), whether said liability is premised on contract or on tort (including without limitation strict liability or negligence). This general indemnification shall not be construed as limiting or qualifying the County’s other indemnification rights available under the law.

## **XII. DECOMMISSIONING PLAN**

Prior to the issuance of construction permits, Owner or Operator shall prepare a Decommissioning Plan with the following elements:

- A.** Provisions describing the triggering events for decommission the WECS Project;
  
- B.** Provisions for the removal of above-ground structures, debris and cabling, and provisions for the removal of underground foundations and cables down to a depth of 3 ½ feet below the soil surface;
  
- C.** Provisions for the restoration of the soil and vegetation;
  
- D.** An estimate of the decommissioning costs and salvage value, certified by a Professional Engineer or other qualified professional reasonably acceptable to the County, which shall be updated and submitted to the Ford County Zoning Enforcing Officer every five years;
  
- E.** Financial Assurance, secured by the Owner or Operator, for the purpose of adequately performing decommissioning, in an amount equal the positive difference, if any, between the Professional Engineer’s certified estimate of the decommissioning costs and salvage value;

- F.** Identification of and procedures for County access to Financial Assurances;
- G.** A provision that the terms of the Decommissioning Plan shall be binding upon the Owner or Operator and any of their successors, assigns, or heirs; and
- H.** A provision that the County shall have access to the site, pursuant to reasonable notice, to effect or complete decommissioning.

### **XIII. REMEDIES**

- A.** The Applicant's, Owner's, or Operator's failure to materially comply with any of the above provisions shall constitute a default under this Ordinance. Approval of the conditional use for a WECS shall be deemed conclusive evidence that the Applicant, Owner, or Operator has complied with the above provisions with respect to application for and approval of such special use.
- 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 after the 60 day period: (i) the Applicant, Owner, or Operator has not cured the alleged default, or (ii) the County determines in its discretion, that the parties cannot resolve the alleged default(s) within the good faith negotiation period, the existing County ordinance provisions addressing the resolution of such default(s) shall govern.