# CHRISTIAN COUNTY ORDINANCE REGULATING THE SITING OF WIND ENERGY CONVERSION SYSTEMS ORDINANCE NO. 02008 ZN 004

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### I. INTRODUCTION

## A. Title

This Ordinance shall be known, cited and referred to as the Christian County Wind Energy Siting Ordinance.

## B. Purpose

This Ordinance is adopted for the following purposes:

- 1. To assure that any development and production of wind-generated electricity in Christian 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 persons who submits to the County pursuant to Section V of this Ordinance, an application for the siting of any WECS or Substation.
- **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.
- 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 an equity interest in the WECS(s), including the 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 the State of Illinois.

- 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 building, hospitals, and day care facilities. Primary Structure excludes structures such as hunting sheds, storage sheds, pool houses, unattached garages and barns.
- **G.** "Substation" means that apparatus that connects the electrical collection system of the WECS (s) and increases the voltage for connection with the utility's transmission lines.
- H. "Wind Energy Conversion System" ("WECS") means all necessary devices that together convert wind energy into electricity, including the rotor, nacelle, generator, WECS Tower, electrical components, WECS foundation, transformer, and electrical cabling from the WECS Tower to the Substation(s).
- I. "WECS Project" means the collection of WECS(s) and Substations as specified in the siting approval application pursuant to Section V of this Ordinance.
- J. "WECS Tower" means the support structure to which the nacelle and rotor are attached.
- **K.** "WECS Tower 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 siting of WECS(s) and Substations that generate electricity to be sold to wholesale or retail markets, except that owners of WECS(s) with an aggregate generating capacity of 3MW or less who locate the WECS(s) on their own property are not subject to this Ordinance.

## IV. PROHIBITION

No WECS or Substation governed by Section III of this Ordinance shall be constructed, erected, installed or located within Christian County unless prior siting approval has been obtained for each individual WECS and Substation pursuant to this Ordinance.

## V. SITING APPROVAL APPLICATION

- A. To obtain siting approval, the Applicant must first submit a siting approval application to the County.
- **B.** The siting approval 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), number of WECS(s), and 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 numbers(s) of the Applicant(s), Owner and Operator, and all property owner(s), if known;
  - 3. A site plan for the installation of WECS(s) 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, substation(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; and
  - **5.** Any other information normally required by the County as part of its Zoning Ordinance.
- C. The Applicant shall immediately notify Christian County of any changes to the information provided in Section V.B. above that occur while the siting approval 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"). Applicants 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.
- 2. Following the granting of siting approval 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 within accepted professional standards, given local soil and climate conditions.

#### B. Controls and Brakes

1. 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.

## C. Electrical Components

All electrical components of the WECS shall conform to applicable local, state, and national codes, and relevant national and international standards (e.g. ANSI and International Electrical Commission).

#### D. Color

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

## **E.** Compliance with the Federal Aviation Administration

The Applicant for the WECS shall comply with all applicable FAA requirements and shall provide documentation of compliance to the Christian County Zoning Administrator.

## F. 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.

## G. 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.

#### H. Setbacks

- 1. All WECS Towers shall be set back at least 1000 feet from any Primary Structure. 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 may waive this setback requirement; but in no case shall a WECS Tower be located closer to a Primary Structure then 1.10 times the WECS Tower Height. All WECS Towers shall have a setback of 2000 feet from all residential districts
- 2. All WECS Towers shall be set back a distance of at least 1.10 times the WECS Tower Height from public roads, third party transmission lines, and communication towers. 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. The County Board may waive this setback requirement.
- 3. All WECS Towers shall be set back a distance of at least 1.10 times the WECS Tower Height from adjacent property lines. The affected adjacent property owner may waive this setback requirement.

I. Compliance with Additional Regulations

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

- J. Use of Public Roads
  - 1. An Applicant, Owner, or Operation proposing to use county or township road(s), for the purpose of transporting WECS or Substation parts and/or equipment for construction, operation, or maintenance of the WECS(s) or Substation(s) shall;
    - a. Identify all such public roads; and
    - b. Obtain applicable weight and size permits and easements for placement of cables on or under rights of way 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 and township, the Applicant, Owner or Operator shall:
    - a. Conduct a pre-construction baseline survey to determine existing road conditions for assessing potentional future damage, and the need for pre-construction modifications and improvements on existing roadways; and
    - b. Secure Financial Assurance, in a reasonable amount agreed to by the relevant parties, which shall be contained in a road use agreement which the parties must enter into before construction begins for the purpose of repairing any damage to public roads caused by constructing, operating or maintaining the WECS.

K.

1. All WECS facilities will have a maximum height not to exceed 450 feet.

## VII. OPERATION

#### A. Maintenance

- 1. The Owner or Operator of the WECS must submit, on an annual basis, a summary of the operation and maintenance reports to the County. In addition to the above annual summary, the Owner or Operator must furnish such operation and maintenance reports as the County reasonable requests.
- 2. 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 requires re-certification.

### B. Interference

- 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. The Applicant, Owner or Operator shall submit to the local fire department a copy of the site plan.
- 2. 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.
- 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 siting approval application process, shall appropriately demonstrate compliance with the above noise requirements.

#### IX. BIRDS

A qualified professional, such as an ornithologist or wildlife biologist, shall conduct an avian habitat study, as part of the siting approval 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.

### XI. LIABILITY INSURANCE

The 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 \$1 million per occurrence and \$1 million in the aggregate.

## XII. DECOMMISSIONING PLAN

Prior to receiving siting approval under this Ordinance, the County and the Applicant, Owner, and/or Operator must formulate a Decommissioning Plan to ensure that the WECS Project is properly decommissioned. The Decommissioning Plan shall include:

- A. Provisions describing the triggering events for decommissioning the WECS Project;
- **B.** Provisions for the removal of structures, debris and cabling, including those below the soil surface;
- **C.** Provisions for the restoration of the soil and vegetation;
- **D.** An estimate of the decommissioning costs certified by a Professional Engineer;
- **E.** Financial Assurance, secured by the Owner or Operator, for the purpose of adequately performing decommissioning, in an amount equal to the Professional Engineer's certified estimate of the decommissioning costs;
- **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 the 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 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. All issues regarding the siting of wind energy conversion systems is governed by this ordinance and no other county ordinance applies.

#### XIV. FEE SCHEDULE

- A. Upon submittal of the application for a wind energy converstion system special use, shall submit a certified check to Christian County in the amount of \$50,000. This amount shall be placed in a guaranteed money market account that will be used to cover the County's cost incurred during the special use application review process and public hearing(s). Should the actual costs to the County exceed \$50,000, the applicant shall be responsible for those costs and shall remit additional funds within 15 days of the notice from the County. An amount remaining in the account after the County renders its decision and all bills and invoices have been paid, shall be refunded to the applicant. The County requests that the applicant shall file ten copies of the WECS special use application upon submittal of the WECS special use application fee.
- B. The building permit fee for each new "Wind Energy Conversion System (WECS) Tower", including the infrastructure that the tower supports shall be \$5000. Fee for any major improvements to an existing WECS Tower, including the infrastructure for the tower support shall be \$2500.

BE IT FINALLY ORDAINED, that the Board reserves the express right to change, modify or terminate these regulations and procedures at any time, in whole or in part, for any reason, with or without prior notice upon its own unilateral act.

APPROVED AND ADOPTED by the County Board of Christian County, Illinois, this 20th day of May, 2008.

John C Curtin, Chairman Christian County Board

ATTEST:

Linda K. Curtin

Christian County Clerk