

Resolution 2009-

ORDINANCE

REGULATING THE SITING OF WIND ENERGY
CONVERSION SYSTEMS IN MASON COUNTY

WHEREAS, pursuant to Public Act 95-1027, it is the policy goal of the State of Illinois that 25% of electric energy consumed in the state by the year 2025 be generated from renewable resources; and

WHEREAS, such policy further states that 75% of the renewable resources must come from wind power; and

WHEREAS, certain unincorporated areas of Mason County appear to be well suited for the development of wind energy conversion systems; and

WHEREAS, the County of Mason, State of Illinois is authorized pursuant to 55 ILCS 5/5-12010 to establish standards for wind farms and electric generating wind devices, and may also regulate the siting of wind farms in the unincorporated areas of the county; and

WHEREAS, the County Board has determined that it is appropriate and beneficial that the county adopt certain standards, regulations, and procedures for the safe and orderly development of wind energy conversion systems in Mason County.

NOW, THEREFORE BE IT ORDAINED BY the County Board of Mason County that the Mason County Wind Farm Ordinance attached hereto and made a part hereof is hereby approved and adopted.

PASSED, APPROVED, AND ADOPTED by the County Board of Mason County this 12th day of May, 2009.

JAMES C. GRIFFIN, Chairman

ATTEST:

WILLIAM R. BLESSMAN, County Clerk

ORDINANCE REGULATING THE SITING OF
WIND ENERGY CONVERSION SYSTEMS IN MASON COUNTY, ILLINOIS

- I. INTRODUCTION
 - A. TITLE
 - B. PURPOSE
- II. DEFINITIONS
- III. APPLICABILITY
- IV. PROHIBITION
- V. SITING APPROVAL APPLICATION
- VI. DESIGN AND INSTALLATION
 - A. DESIGN SAFETY CERTIFICATION
 - B. CONTROLS AND BRAKES
 - C. ELECTRICAL COMPONENTS
 - D. COLOR
 - E. COMPLIANCE WITH THE F.A.A.
 - F. WARNINGS
 - G. CLIMB PREVENTION
 - H. SETBACKS
 - I. COMPLIANCE WITH ADDITIONAL REGULATIONS
 - J. USE OF PUBLIC ROADS
 - K. DRAINAGE SYSTEMS
 - L. HEIGHT
- VII. OPERATION
 - A. MAINTENANCE
 - B. INTERFERENCE
 - C. COORDINATION WITH FIRE DEPARTMENT
 - D. MATERIALS HANDLING, STORAGE AND DISPOSAL
- VIII. NOISE LEVELS
- IX. BIRDS
- X. PUBLIC PARTICIPATION
- XI. LIABILITY INSURANCE
- XII. DECOMMISSIONING PLAN
- XIII. REMEDIES
- XIV. FEE SCHEDULE AND PERMITTING PROCESS
- XV. INTERPRETATION

- XVI. SEVERABILITY
- XVII. REPEAL
- XVIII. EFFECTIVE DATE

I. INTRODUCTION

A. Title

This Ordinance shall be known, cited and referred to as the Mason 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 Mason County is safe and effective subject to reasonable regulations intended to preserve the public health and safety.
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 siting of any WECS or Substation.
- B. "Fall Zone" means the area, defined as the farthest distance from the WECS Tower base, in which a WECS Tower will collapse in the event of a structural failure. This area is less than the total height of the structure.
- C. "Feeder Line" means 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.
- D. "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.
- E. "Meteorological Tower" means those towers which are erected primarily to measure wind speed and direction plus other data relevant to siting a WECS Project. For purposes of this ordinance, Meteorological Towers do not include towers and equipment used by airports, the Illinois Department of Transportation, or other similar applications or government agencies, to monitor weather conditions.
- F. "County Board" means the Mason County Board.
- G. "Mason County Zoning Board" or "Zoning Board" means the Mason County Zoning Board of Appeals.
- H.. "Operator" means the entity responsible for the day-to-day operation and maintenance of the WECS, including any third party subcontractors.
- I. "Owner" means the entity or entities with an 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.
- J. "Professional Engineer" means a qualified individual who is licensed as a professional engineer in any state in the United States.
- K. "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 and structures such as residences, commercial buildings, hospitals, day care facilities. Primary Structure excludes ancillary structures such as hunting sheds, storage sheds, pool houses, unattached garages and barns.
- L. "Property Line" means the boundary line of the area over which the entity applying for a WECS permit has legal control of the purposes of installation of a WECS. This control may be attained through fee title ownership, lease, easement, or other appropriate contractual relationship between the project developer or Owner and landowner.
- M. "Public Conservation Lands" means land owned in fee title by state or federal agencies and managed specifically for conservation purposes, including but not limited to state and federal parks, state and federal wildlife management areas, state scientific and natural areas, and federal wildlife refuges and waterfowl protection areas. Public conservation lands do not include private lands upon which conservation easements have been sold to government agencies or non-profit conservation organizations. Public conservation lands also do not include private lands for which the owners have entered into contractual relationships with government or non-profit conservation organizations for conservation purposes.
- N. "Substation" means the apparatus that connects the electrical collection system of the WECS(s) and increases the voltage for connection with the utility's transmission lines.
- O. "Transmission Line" means those electrical power lines that carry voltages of at least 69,000 volts (69 KV) and are primarily used to carry electrical energy over medium to long distances rather than

directly interconnecting and supplying electric energy to retail customers.

- V
- P. "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).
 - Q. "WECS Project" means the collection of WECSs and Substations as specified in the siting approval application pursuant to Section of this Ordinance.
 - R. "WECS Tower" means the support structure to which the nacelle and rotor are attached.
 - S. "WECS Tower Height" means the distance from the rotor blade at its highest point to the top surface of the WECS foundation.
 - T. "Wind Turbine" means any piece of electrical generating equipment that converts the kinetic energy of moving wind into electrical energy through the use of airfoils or similar devices to capture the wind.

III. APPLICABILITY

This Ordinance governs the siting of WECSs and Substations that generate electricity to be sold to wholesale or retail markets, except that owners of WECSs with an aggregate generating capacity of 0.5MW 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 the 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. The siting of any WECS shall be by Special Use Permit on A-Agriculturally Zoned Land. The Special Use Permit procedure set forth in the Mason County Zoning Ordinance shall govern the process except as otherwise established under this Ordinance.

- by
- B. The siting approval application shall contain or be accompanied the following information:
1. A WECS Project Summary, including, to the extent available: (1) a general description of the project, including (i) its approximate overall name plate generating capacity, (ii) the potential equipment manufacturer(s), (iii) type(s) of WECS(s), (iv) number of WECSs, and name plate generating capacity of each WECS, (v) the maximum height of the WECS Tower(s) and maximum diameter of the WECS(s) rotor(s), and (vi) 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, and documentation demonstrating land ownership or legal control of the property;
 3. A Site Plan for the installation of WECSs showing the planned location of each WECS Tower, including legal descriptions for each site, 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, the location of any wetlands, flood plain, drainage ditches, scenic and natural areas within 1,500 feet of the proposed WECS, the location of all known communications towers within 2 miles of the proposed WECS, and the layout of all structures within the geographical boundaries of any applicable setback, construction staging area(s);
 4. An permit application filed with the Federal Aviation Administration, together with a proposed WECS Facility lighting plan that describes any lighting which may be

required by the FAA including the planned number and location of lights, light color, whether any such lights will be flashing and mitigation measures to control the impact of lighting on neighboring properties;

5. A proposed Decommissioning Plan for the WECS project;
6. An ingress and egress study for all construction and operation, depicting travel routes within Mason County to be used for delivery of equipment and components for construction of the WECS.
7. All required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance; and
8. Any other information normally required by the County as part of its permitting requirements for siting buildings or other structures.

C. The Applicant shall notify the County of any changes to the information provided in Section V.B. above that occur while the siting approval application is pending.

D. The Applicant shall submit six (6) copies of the siting approval application to the Chairman of the Mason County Board.

VI. DESIGN AND INSTALLATION

A. Design Safety Certification

1. WECSs 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 ("CGL"), 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 WECSs shall be equipped with a redundant braking system and controls which limit the rotational speed of the blade within the design limits of the rotor. 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). All WECS Project wiring shall be underground to a depth of not less than 36 inches, except where the WECS Project wiring is connected to the transmission or distribution network or in those locations, such as ditches, streams, or other land features which make underground wiring unsafe or impractical.

D. Color

Towers, nacelles, and blades shall be painted white or gray or another non-reflective, unobtrusive color. No advertising or signage, other than required safety warning signs and standard manufacturer nomenclature, shall be permitted up on any portion of the WECS structure.

E. Compliance with the Federal Aviation Administration (FAA)

The Applicant for the WECS shall comply with all applicable FAA Requirements and shall provide documentation evidencing compliance to the Chairman of the County Board.

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, plastic sleeves, 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. All WECS towers shall be self-supporting, and no guy wire supported WECS towers shall be permitted~~

G. Climb Prevention

1. All WECS Towers must be unclimbable by design or protected by anti-climbing devices such as fences with locking portals at least six feet high or anti-climbing devices 12 feet vertically from the base of the WECS Tower.

H. Setback Requirements

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 than 1.10 times the WECS Tower Height or within the Fall Zone of the WECS Tower.
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. The County 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 or the Fall Zone, whichever is greater, from adjacent Property Lines. The affected adjacent property owner may waive this setback requirement.
4. All WECS Towers shall be set back a distance of at least 750 feet from the Property Line of any Public Conservation Lands, and a distance of at least 1500 feet from any river bluff located on public or private property.

5. The Applicant does not need to obtain a variance from the County upon waiver by either the County or property owner of any of the above setback requirements. Any waiver of any of the above setback requirements shall run with the land and be recorded by the Owner as part of the chain of title in the deed of the subject property.

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 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 the WECS(s) or Substation(s), shall identify all such public roads; and 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 ~~cause to be conducted a pre-construction baseline survey~~ Transportation Impact Study acceptable to the county to determine existing road conditions for assessing potential future damage. The study shall identify roads to be used for transport of WECS or Substation parts and/or equipment for construction, operation, or maintenance of the WECS(s) or Substation(s), the types and weights of loads to be transported, and the types of vehicles which are to be utilized. The study shall also include an estimate of the cost and description of work required to upgrade roads, bridges, and other structures to allow transport of over-weight loads. The owner hereby agrees to return roads, bridges, and other structures traveled over during the course of construction or maintenance of the WECS to pre-construction condition or better in accordance with Illinois Department of Transportation Standards for the particular class of roadway. The owner shall secure Financial Assurance in ~~the amount of \$100,000 per mile~~ a sufficient

amount for the purpose of repairing any damage to non-state public routes (including township, county and municipal routes/streets, storm sewers, bridges, and culverts) caused by constructing, operating, maintaining, or decommissioning of the WECS. The County reserves the right to determine performance adequacy.

K. Drainage Systems

The Owner shall be responsible for repairing, in a timely fashion, any damage caused to public drainage systems [or private agricultural] drainage systems by the construction, operation or maintenance of the WECS.

L. Height

The maximum WECS Tower Height shall not exceed 525 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 reasonably 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)(I) 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)(I) of this Ordinance to determine whether the physical modification requires re-certification.

B. Interference

1. The Applicant shall minimize or mitigate interference with electromagnetic communications, such as radio, telephone, microwaves or television signals, caused by the operation of the WECS. 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. 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 WECSs 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 \$5 million per occurrence and \$5 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 to be updated every five years.
- 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 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 County determines in its discretion, that the parties cannot resolve the alleged default(s) within the good faith negotiation period, then existing County ordinance provisions addressing the resolution of such default(s) shall govern.

XIV. FEE SCHEDULE AND PERMITTING PROCESS

- A. Upon submittal of the application for a WECS Project, the Applicant shall submit a check to Mason County in the amount of \$30,000. These funds shall be placed in a guaranteed money market account and will be used to compensate the County for costs incurred during the review process for the WECS application. Should the actual costs to the County exceed \$30,000, the Applicant shall be responsible for those additional costs and shall remit additional funds to the County within 15 days of receipt of a request from the County. Any amount remaining in the money market account after the County completes the application process and pays all bills and invoices shall be refunded to the Applicant.

The permitting fee for each respective WECS structure shall be \$?? per each foot in height measured from the foundation pad to the center of the rotor hub. (or \$s?? in total height to the blade tip in a vertical position)

B. Review of Application

1. Review by the County Board

- a. The Mason County Board shall consider the application following the proper submittal of the application.
- b. If the Board finds that all conditions have been satisfactorily met by the Applicant, it shall tentatively approve the application and forward such to the Zoning Board of Appeals for a public hearing on the application and proposed WECS Project pursuant to the Special Use Permit Procedure set forth in the Mason County Zoning Ordinance, provided that the notice requirements shall be as herein established pursuant to state law. The Zoning Board shall publish a notice for the hearing in a newspaper of general circulation in Mason County, Illinois, not fewer than 30 prior to the public hearing.
- c. The Zoning Board shall hold the public hearing and review the application at the hearing. After the public hearing, the Zoning Board shall make a report and a recommendation to the County Board that the WECS

application be approved or denied, or approved with conditions. The Zoning Board shall transmit the report to the County Board in advance of the next regularly-scheduled meeting of the County Board.

2. Review by the County Board

- a. Upon receipt of the Zoning Board's report, the County Board shall consider the WECS application at its next regularly-scheduled meeting. The County Board may deny or approve the Zoning Board's recommendation about the application, or approve the recommendation with conditions. The County Board may also refer the application back to the Zoning Board for further study before making its final decision.
- b. If the County Board approves the application, it shall issue a Certificate of Permit and affix the Board's seal upon the Permit together with the signature of the County Board's Chairman and the Mason County Clerk. If it disapproves, the County Board shall set forth its reasons in its records and provide the Applicant with a copy.

C. Terms and Limitations of Permit

1. Permit Effective Date

The Certificate of Permit shall become effective upon approval by the County Board.

2. Failure to Commence Construction or Operation

Unless otherwise stated in the conditions of the Certificate of Permit, substantial construction work on the WECS Project shall commence within eighteen (18) months of the effective date of the Certificate of Permit unless such time period is extended by the County Board. If no extension of time is granted, the Certificate of Permit shall immediately terminate upon expiration of the eighteen (18) month period.

3. Revocation of Certificate of Permit

Upon finding a material violation of the terms of the Certificate of Permit, the County Board shall have the authority to revoke the Certificate of Permit after notice to the Applicant/Permittee and after affording the Applicant/Permittee an opportunity to be heard.

XV. INTERPRETATION

The provisions of these regulations shall be held to the minimum requirements adopted for the promotion and preservation of public health, safety and general welfare of County of Mason. These regulations are not intended to repeal, abrogate, annul or in any manner interfere with existing regulations or laws of the County of Mason nor conflict with any statutes of the State of Illinois, except that these regulations shall prevail in cases where these regulations impose a greater restriction than is provided by existing statutes, laws or regulations.

XVI. SEVERABILITY

If any section, paragraph, clause, phrase or part of this Ordinance is for any reason held invalid by any court or competent jurisdiction, such decision shall not affect the validity of the remaining provisions of these regulations, and the application of those provisions to any persons or circumstances shall not be affected thereby.

XVII. REPEAL

All ordinances and regulations and amendments thereto enacted and/or adopted by the County Board that are inconsistent with the provisions of this Ordinance are hereby repealed, as of the effective date of this Ordinance. The repeal of any prior ordinance or its amendments does not affect or impair any act done, offense committed or right accruing, accrued or acquired or liability, penalty, forfeiture or punishment incurred prior to the time enforced, prosecuted or inflicted.

XVIII. EFFECTIVE DATE

This Ordinance is an ordinance necessary for the health and safety of the people of Mason County, Illinois, and shall be in full force and effect from and after its passage.

