

**ZONING RESOLUTION OF KNOX COUNTY  
APPENDIX E  
KNOX COUNTY COMMERCIAL WIND ENERGY CONVERSION SYSTEMS  
SITING ORDINANCE**

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Effective June 28, 2023

## COMMERCIAL WIND ENERGY CONVERSION SYSTEMS SITING ORDINANCE

### I. DEFINITIONS

- A. "Applicant" means the entity who submits to the County an application for the siting and operation of any WECS or Substation. All references to Applicant in this Ordinance shall include Applicant's successors-in-interest and assigns, which includes a WECS Permittee (as defined below).
- B. "Commercial Operation Date" means the calendar date on which the WECS Project produces power for commercial sale, not including test power.
- C. "Commercial Wind Energy Facility" means a wind energy conversion facility of equal or greater than 500 kilowatts in total nameplate generating capacity. Also referred to herein as "Wind Energy Conversion System" or "WECS" or "WECS Project".
- D. "Financial Assurance" or "Financial Security" or "Decommission Security" means assurance from a credit worthy party, examples of which include a surety bond (e.g., performance and payment 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 and operation of 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. "Notice to Proceed" means a written document, named as such, stating that the Applicant expresses an intent to commence construction activities on a WECS Project and identifying the date on which the construction activities are scheduled to commence.
- G. "Nonparticipating property" means real property that is not a participating property.
- H. "Nonparticipating residence" means a residence that is located on nonparticipating property and that is existing and occupied on the date

that an application for a permit to develop the WECS Project is filed with the county.

- I. "Occupied community building" means any one or more of the following buildings that is existing and occupied on the date that the application for a permit to develop the WECS Project is filed with the county: a school, place of worship, day care facility, public library, or community center.
- J. "Operator" means the person or entity responsible for the day-to-day operation and maintenance of a wind energy conversion system, including any third-party subcontractors. The Operator must be a qualified wind power professional. All references to Operator in the Ordinance shall include Operator's successors-in-interest and assigns.
- K. "Owner" means the person or entity or entities with an equity interest in a wind energy conversion system, including their respective successors-in-interest and assigns. The Owner does not mean (i) the property owner from whom land is leased for locating a wind energy conversion system (unless the property owner has an equity interest in a wind energy conversion system); or (ii) any person holding a security interest in a wind energy conversion system solely to secure an extension of credit, or a person foreclosing on such security interest, provided that after foreclosure, such person seeks to sell a wind energy conversion system at the earliest practicable date. This definition includes the definition of Facility Owner as defined in 55 ILCS 5/5-12020.
- L. "Participating property" means real property that is the subject of a written agreement between a facility owner and the owner of the real property that provides the facility owner an easement, option, lease, or license to use the real property for the purpose of constructing a WECS Project or supporting facilities. "Participating property" also includes real property that is owned by a facility owner for the purpose of constructing WECS Project or supporting facilities.
- M. "Participating residence" means a residence that is located on participating property and that is existing and occupied on the date that an application for a permit to develop the WECS Project is filed with the county.
- N. "Professional Engineer" means a qualified individual who is licensed as

a professional engineer in any state in the United States. Where a structural engineer is required to take some action under terms of this Ordinance, a Professional Engineer may serve as the structural engineer if he or she has the appropriate structural engineering certification.

- O. "Protected lands" means real property that is subject to a permanent conservation right consistent with the Real Property Conservation Rights Act, or registered or designated as a nature preserve, buffer, or land and water reserve under the Illinois Natural Areas Preservation Act.
- P. "Public Conservation Lands" means land owned in fee title by County, state or federal agencies and managed specifically for conservation purposes, including but not limited to County, 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.
- P. "Conditional Use Permit" means a permit approved by the County Board, after a public hearing, allowing a particular use at a specified location subject to compliance with certain specified special conditions as may be required by the County Board.
- Q. "Substation" means the apparatus that collects and connects the electrical collection system of the WECS(s) and increases the voltage for connection with the utility's transmission lines.
- R. "Supporting Facilities" means the transmission lines, substations, access roads, meteorological towers, storage containers, and equipment associated with the generation and storage of electricity by the WECS.
- S. "WECS Permittee" means an Applicant who applies for and receives a Conditional Use Permit under this Ordinance for the siting and operation of any WECS or Substation. All references to a WECS Permittee in this Ordinance shall include a WECS Permittee's successors-in-interest and assigns.

- T. "WECS Tower" or "Wind Tower" means and includes wind turbine tower, nacelle, and blades.
- U. "WECS Tower Height" means the distance from the rotor blade at its highest point to the top surface of the WECS foundation.
- V. "WECS Building Permit" means a permit necessary for the commencement of work performed toward the construction, erection or installation of an approved WECS, Substation or operations and maintenance building in connection with a WECS Project. A WECS Building Permit may be issued by the county after a WECS Project has obtained a Conditional Use Permit from the County Board and the Zoning Administrator, or their designee determines that all conditions, if any, have been satisfied that are imposed by the Conditional Use Permit. The WECS Building Permit shall require the Applicant (WECS Permittee) to deliver a written "Notice to Proceed" for the WECS Project to the county prior to commencement of construction of the WECS Project. The term "commencement of construction", as used in this Ordinance, includes any site development work (e.g., demolition, grubbing, grading, excavation, road work, construction of Project-related structures and infrastructure improvements, etc.) regarding the WECS Project.
- W. "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.

## II. APPLICABILITY

- A. This Ordinance governs the siting of WECS and Substations that generate electricity to be sold to wholesale or retail markets.
- B. Owners of WECS 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.

## III. PROHIBITION

- A. No WECS Project, WECS or Substation governed by this Ordinance shall be constructed, erected, installed, or located within the county, unless prior siting approval has been obtained for each individual WECS

Project, WECS and Substation or for a group of WECS Projects and Substations under a joint siting application pursuant to this Ordinance.

#### IV. CONDITIONAL USE PERMIT APPLICATION

- A. To obtain siting approval, the Applicant must first submit a Conditional Use Permit application to the County.
- B. The Conditional Use Permit application shall contain or be accompanied by the following information:
  - 1. A WECS Project Summary, including, to the extent available: (a) 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) the number of WECS, 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), (vi) the number of Substations, (vii) a project site plan, project phasing plan and project construction timeline plan, and (viii) the general location of the project; and (b) 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 WECS Project showing the planned location of each WECS Tower, including legal descriptions for each site, guy lines and anchor bases (if any), Participating and Non-participating Residences, Occupied Community Buildings parcel boundary lines (including identification of adjoining properties), setback lines, public access roads and turnout locations, Substation(s), operations and maintenance buildings, and permanent Meteorological Towers, electrical cabling from the WECS Tower to the Substation(s), ancillary equipment, third party transmission lines, the location of any wetlands, flood plain, drainage structures including surface ditches and subsurface drainage lines, underground mines, scenic and natural areas within one thousand five hundred (1,500) feet of the proposed WECS, the location of all known communications towers within

two (2) miles of the proposed WECS, and the layout of all structures within the geographical boundaries of any applicable setback;

4. All determinations of No Hazard to Air Navigation from the Federal Aviation Administration;
5. A proposed Decommissioning Plan for the WECS Project including cost estimations;
6. All required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance;
7. An Agricultural Impact Mitigation Agreement (AIMA) executed between the Applicant and the Illinois Department of Agriculture;
8. The topographic map shall include the WECS Project site and the surrounding area;
9. Any other information normally required by the County as part of its permitting requirements for siting buildings or other structures;
10. Waivers from the setback requirements executed by the occupied community building owners and/or the non-participating property owners bearing a file stamp from the County Recorder of Deeds Office confirming that the waiver was recorded against title to the affected real property.
11. Waivers from the shadow flicker mitigation requirements executed by the occupied community building owners and/or the non-participating property owners bearing a file stamp from the County Recorder of Deeds Office confirming that the waiver was recorded against title to the affected real property.
12. Results and recommendations from the Illinois Dept. of Natural Resources obtained through the Ecological Compliance Assessment Tool or a comparable successor tool.
13. Results of the United States Fish and Wildlife Service's Information for Planning and Consulting environmental review or

a comparable successor tool that is consistent with the United States Fish and Wildlife Service's Land-Based Wind Energy Guidelines.

14. Information demonstrating that the WECS Project will avoid protected lands.
  15. Any other information requested by the County or the County consultants that is necessary to evaluate the siting application and operation of the WECS Project and to demonstrate that the WECS Project meets each of the regulations in this Ordinance, including the Conditional Use Permit standards set forth below.
- C. Material changes to the application are not permitted once the notice of the public hearing has been published, unless requested or permitted by the County; and
- D. The Applicant shall submit twelve (12) copies of the Conditional Use Permit application to the County, and at least one (1) copy in electronic format.

## V. 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. All turbines shall be new equipment commercially available; no used or experimental equipment shall be used in the WECS Project without the approval of a variance by the County Board.
2. Following the granting of siting approval under this Ordinance, a structural engineer shall certify, as part of the WECS Building Permit application process, that the foundation and tower design of the WECS is within accepted professional standards, given local soil, subsurface and climate conditions.



B. Controls and Brakes

All WECSs shall be equipped with a redundant braking system. This includes both aerodynamic overspeed controls (including variable pitch, tip, tilt, 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. Aesthetics and Lighting

The following items are recommended standards to mitigate visual impact:

1. Coatings and Coloring: Towers and blades shall be painted white or gray or another non-reflective, unobtrusive color.
2. Turbine Consistency: To the extent feasible, the WECS 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 color and direction with nearby facilities.
3. Lighting: WECS Projects shall utilize minimal lighting that is compliant with the applicable FAA regulations, as amended by the FAA. To the extent that such tower lighting is available, and is approved by the FAA for a WECS Project, the Applicant shall install Aircraft Detection Lighting Systems ("ADLS") or other similar technology to reduce light pollution and visual impacts caused by the WECS Towers.
4. Intra-project Power and Communication Lines: All power lines used to collect power from individual turbines and all communication lines shall be buried underground at a depth in accordance with the Agricultural Impact Mitigation Agreement

until same reach the property line or a substation adjacent to the property line.

E. Warnings

1. A reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and Substations, and at all entrances to the Wind Towers.
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 fifteen (15) feet from the ground.

F. 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 (6) feet high; or
  - b. Anti-climbing devices twelve (12) feet vertically from the base of the WECS Tower.

G. Setback Requirements

1. WECS Towers shall be sited as follows, with setback distances measured from the center of the base of the WECS Tower:
  - a. Occupied Community Buildings: 2.1 times the maximum blade tip height of the WECS Tower to the nearest point on the outside wall of the structure.
  - b. Participating Residences: 1.1 times the maximum blade tip height of the WECS Tower to the nearest point on the outside wall of the structure;
  - c. Nonparticipating Residences: 2.1 times the maximum blade tip height of the WECS Tower to the nearest point on the outside wall of the structure;
  - d. Boundary Lines of Participating Property: None.
  - e. Boundary Lines of Nonparticipating Property: 1.1 times the maximum blade tip height of the WECS Tower to the nearest point on the property line of the nonparticipating property.

- f. Public Road Rights-of-Way: 1.1 times the maximum blade tip height of the WECS Tower to the center point of the public road right-of-way.
  - g. Overhead Communication and Electric Transmission and Distribution Facilities (Not Including Overhead Utility Service Lines to Individual Houses or Outbuildings): 1.1 times the maximum blade tip height of the WECS Tower to the nearest edge of the property line, easement, or right of way containing the overhead line.
  - h. Overhead Utility Service Lines to Individual Houses or Outbuildings: None.
  - i. Fish and Wildlife Areas and Illinois Nature Preserve Commission Protected Lands: 2.1 times the maximum blade tip height of the WECS Tower to the nearest point on the property line of the fish and wildlife area or protected land.
2. The setback requirements may be waived by the written consent of the owner(s) of each affected property. The Applicant does not need obtain a variance from the County upon waiver by the property owner of the setback requirement. Any waiver of any of the above setback requirements shall run with the land and be recorded with the Recorder of Deeds of the County.

#### H. Compliance with Additional Regulations

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

#### I. Use of Public Roads

- 1. An Applicant 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:
  - 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 must obtain a weight or size permit from the County, municipality, township or village, the Applicant shall:
  - a. Conduct a pre-construction baseline survey to determine existing road conditions for assessing potential future damage; and
  - b. Any proposed public roads that will be used for construction purposes shall be identified and approved in writing by the respective Road District Commissioner and the County Engineer prior to the granting of the Conditional Use Permit. Traffic for construction purposes shall be limited to these roads. All overweight and/or oversized loads to be transported on public roads may require a permit from the respective highway authority. Any road damage caused by the transport of the facility's equipment, the installation, maintenance, or removal, must be completely repaired to the reasonable satisfaction of the Road District Commissioner and the County Engineer. The Road District Commissioner and County Engineer may choose to require either remediation of road repair upon completion of the WECS Project or are authorized to collect fees for overweight and/or oversized load permits. Further, financial assurance in an amount to be fixed by the Road District Commissioner to ensure the Road District or the County that future repairs are completed to their reasonable satisfaction shall be provided. Applicant shall submit a draft form of said financial assurance with application for Conditional Use Permit.
  - c. Enter into a road use agreement with the County and each affected Road District that includes the following provisions, at a minimum:
    - i. Project layout map;
    - ii. Transportation impact analysis;
    - iii. Pre-construction plans'
    - iv. Project traffic map;
    - v. Project scope of repairs;
    - vi. Post-construction repairs;

- vii. Insurance;
- viii. Financial Security in forms and amounts acceptable to the County;

The road use agreement shall require Applicant to be responsible for the reasonable cost of improving roads used to construct WECS and the reasonable cost of repairing roads used by the facility owner during construction of the WECS so that those roads are in a condition that is safe for the driving public after the completion of the WECS construction. Roadways improved in preparation for and during the construction of the WECS shall be repaired and restored to the improved condition at the reasonable cost of the developer if the roadways have degraded or were damaged as a result of construction-related activities.

- 3. All repairs and improvements to County public roads and roadway appurtenances shall be subject to the prior approval of the County before being made and shall also be subject to inspection and acceptance by the County after such repairs and improvements are completed. The County's road use agreement, and any further agreements contemplated therein, regarding the maintenance and repair of County public roads and highways, must be approved by the County Board prior to the Board's approval of any WECS Building Permit applications related to the construction of the proposed WECS Project.

#### J. Site Assessment

To ensure that the subsurface conditions of the site will provide proper support for the WECS Towers and soil restoration, the Applicant, at its expense, shall provide soil and geotechnical boring reports to the County Engineer with respect to each WECS Tower location, as part of its WECS Building Permit. The Applicant shall follow the guidelines for Conservation Practices Impact Mitigation submitted by the County Soil and Water Conservation District (or equivalent regulatory agency). The Applicant shall submit grading plans for the proposed Substations for review and comment by the County Soil and Water Conservation District prior to the issuance of any WECS Building Permit for the construction of said substations.

K. Communications Analysis; Interference

1. The Applicant, at its expense, shall have a third party, qualified professional (after submission of resume and relevant work experience) conduct an appropriate analysis of the television reception documenting the television stations that are received within one and one-half (1 ½) miles of the footprint of the WECS Project. The results of said study shall be public record and will serve as a baseline reading for television reception conditions prior to the construction of the WECS Project and shall be submitted as part of the Conditional Use Permit application.
2. The Applicant, at its expense, shall have a third party, qualified professional (after submission of resume and relevant work experience), conduct a communications analysis that indicates that the E9-1-1 communications, emergency communications or official County and local municipal communications reception shall not be negatively impacted or influenced by the proposed wind power facility. Said communication analysis shall be a public record and shall be submitted as part of the Conditional Use Permit application.
3. The Applicant and the Operator, at the Applicant's expense, shall take immediate actions to minimize or mitigate interference with electromagnetic communications, such as radio, telephone, microwaves or television signals and to eliminate any such interference that impacts local government public safety (police, fire, emergency medical services, emergency management services, 911 dispatch) communications, 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 WECS 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 and the Operator, at Applicant's expense, shall take reasonable measures to minimize and mitigate such anticipated interference and with regard to interference with local, government public safety (police, fire, emergency medical services, emergency management services, 911 dispatch) communications, the Applicant and the Operator,

at Applicant's expense, shall take all necessary and available commercial measures to eliminate any such interference. If, after construction of the WECS, the Applicant (WECS Permittee) or Operator receives a written complaint related to the above-mentioned interference, the Applicant (WECS Permittee) shall take commercially reasonable steps to respond to the complaint, except in the case of a complaint of interference with local, government public safety (police, fire, emergency medical services, emergency management services, 911 dispatch) communications. In the case of local, government public safety communications, the Applicant (WECS Permittee) and the Operator, at the Applicant's expense, shall immediately take all necessary and available commercial measures to eliminate any such interference.

4. If, after construction of the WECS, the Applicant (WECS Permittee) or Operator receives a written complaint related to interference with local broadcast residential television, the Applicant (WECS Permittee) shall take commercially reasonable steps to respond to the complaint. A summary of complaint and subsequent response from Applicant shall be forwarded to the Knox County Board and Knox County Zoning office for review. Once the construction is complete and a television reception complaint is received by the Knox County Zoning Office, who will have thirty (30) calendar days to verify the complaint, the Applicant (WECS Permittee) will be given fifteen (15) calendar days to respond, in writing (validation date). Said response shall be addressed and forwarded to the Knox County Board, Knox County Zoning Department and the complainant. Such response shall include but not be limited to the following: an acknowledgment that a complaint was made and evaluated by the Applicant (WECS Permittee). If considered valid by the Applicant (WECS Permittee): an explanation, including a timeline, as to what the Applicant (WECS Permittee) intends to do about the complaint. The Applicant (WECS Permittee) of the wind power facility will be given an additional fifteen (15) calendar days from the validation date to resolve said TV reception issue. If considered invalid by the Applicant (WECS Permittee), an explanation, including supporting documentation and expert opinions, as to why the Applicant (WECS Permittee) believes the complaint is not valid. Television reception complaints must be

filed within six (6) months from the date each wind turbine generator goes online.

L. Noise Levels

Noise levels from each WECS or WECS Project shall follow applicable Illinois Pollution Control Board (IPCB) regulations. The Applicant shall submit manufacturer's wind turbine sound power level characteristics and other relevant data regarding wind turbine noise characteristics necessary for a competent noise analysis. The Applicant, through the use of a qualified professional, shall appropriately demonstrate compliance with the applicable noise requirements in its Conditional Use Permit application.

M. Agricultural Impact Mitigation

Pursuant to 505 ILCS 147/15(a), the Applicant, at its expense, shall enter into an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture prior to any public hearing required before a siting decision on the WECS Project application. All impacted agricultural land, whether impacted during construction, operation, or decommissioning activities, must, at a minimum, be remediated by the Applicant pursuant to the terms of the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture. The Applicant shall submit the executed Agricultural Impact Mitigation Agreement to the County as part of the Conditional Use Permit application.

O. Avian and Wildlife Impact Study

The Applicant, at its expense, shall have a third party, qualified professional (after submission of resume and relevant work experience) conduct an avian and wildlife impact study and submit said study to the County as part of the Conditional Use Permit application. Each WECS or WECS Project shall be located, designed, constructed, and operated so as to avoid and if necessary mitigate the impacts to wildlife.

P. As-Built Map and Plans

Within sixty (60) calendar days of completion of construction of the WECS Project, the Applicant or Operator shall deliver "as-built" maps, site plan and engineering plans for the WECS Project that have been signed and stamped by a Professional Engineer and a licensed surveyor.

Q. Engineer's Certificate

The WECS Project engineer's certificate shall be completed by a



structural engineer registered in the State of Illinois or by a Professional Engineer with a certification from a structural engineer registered in the State of Illinois and shall certify that the WECS tower and foundation design is compatible with and appropriate for each turbine design proposed to be installed and that the specific soils and subsurface conditions at the site can support the apparatus, given local soil, subsurface and climate conditions. All commercially installed wind turbines must utilize self-supporting, tubular towers. The WECS Project engineer's certificate shall be a public record and shall be submitted as part of the Conditional Use Permit application.

R. Conformance with Approved Application and Plans

The Applicant shall construct and operate the WECS Project in substantial conformance with the construction plans contained in a County approved submitted Conditional Use Permit application(s), conditions placed upon the operation of the Facility, this ordinance and all applicable state, federal and local laws and regulations.

S. Additional Terms and Conditions

1. All technical submissions as defined in the Professional Engineering Practice Act of 1989 (225 ILCS 325/4(w)) and contained in the Conditional Use Permit Application shall be prepared and signed by an Illinois Professional Engineer (or structural engineer) for the relevant discipline.
2. The County may retain a qualified, independent code inspector or professional engineer both to make appropriate inspections of the WECS Project during and after construction and to consult with the County to confirm that the construction, substantial repair, replacement, repowering and/or decommissioning of the WECS Project is performed in compliance with applicable electrical and building codes. The cost and fees so incurred by the County in retaining said inspector or engineer shall be promptly reimbursed by the Applicant of the WECS Project.
3. The Applicant shall provide locked metal gates or a locked chain are installed at the access road entrances of all the wind turbine generator locations. An exception may be made when the landowner has filed a written statement with the County which

states that the owner does not want a locked metal gate installed and has provided a signed liability waiver to the County.

4. The Conditional Use Permit granted to the Applicant shall bind and inure to the benefit of the Applicant, its successors-in-interest and assigns. If any provision in this Ordinance, or conditions placed upon the operation of the Commercial Wind Energy Facility is held invalid, such invalidity shall not affect any other provision of this Ordinance that can be given effect without the invalid provision and, to this end, the provisions in this Ordinance are severable.
5. The Applicant shall provide an executed road use agreement between the Applicant and, the appropriate governing road and highway jurisdictions or the Illinois Department of Transportation, to the County showing approved entrances prior to the issuance of any WECS Building Permit or prior to construction of the WECS Project.
6. No wind turbine generator shall be installed in any location where its proximity with existing fixed broadcast, retransmission, or reception antenna for radio, television, or wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception. The wind turbine generator shall not be installed in a location along the major axis of existing microwave communications link where its operation is likely to produce electromagnetic interference in the link's operation.
7. The Applicant of the WECS Project shall use two (2) methods to detect icing conditions on turbine blades: (1) sensors that detect when blades become imbalanced or create vibration due to ice accumulation; and (2) meteorological data from on-site meteorological towers, on-site anemometers, and other relevant weather sources that will be used to determine if ice accumulation is occurring. These control systems will either automatically shut down the turbines(s) in icing conditions or the Applicant will manually shut down the turbine(s) if icing conditions are identified.

## VI. OPERATION

### A. Maintenance

1. Annual Report. The Applicant (WECS Permittee) must submit, on an annual basis on the anniversary date of the siting approval application, an operation and maintenance report to the County. The report shall contain the following information: (i) a general description of any physical repairs, replacements or modification(s) to the WECS and/or its infrastructure; (ii) complaints pertaining to setbacks, noise, shadow flicker, appearance, safety, lighting and use of any public roads received by the Applicant concerning the WECS and the resolution of such complaints; (iii) calls for emergency services; (iv) status of liability insurance; and (v) a general summary of service calls to the WECS. Failure to provide the annual report shall be considered a material violation of this Ordinance and subject to Article XI (Remedies).
2. Re-Certification. Any physical modification to the WECS that alters the mechanical load, mechanical load path, or major electrical components shall require re-certification under Design and Safety Certification section, paragraph 1, of this Ordinance. Like-kind replacements and modifications that are made in the ordinary course of operations, including expected repairs and warranty items, shall not require re-certification. Prior to making any physical modification (other than a like-kind replacement or other modifications made in the ordinary course of operations), the Applicant shall confer with a relevant third-party certifying entity identified in Design and Safety Certification section, paragraph 1, of this Ordinance to determine whether the physical modification requires re-certification.

### B. Coordination with Emergency Responders:

1. The Applicant shall submit to the local emergency responders a copy of the Site Plan, Standard Operating Procedures (SOPs) and Standard Operating Guidelines (SOGs), and any amendments to such documents, for the wind power facility so that the local law enforcement, fire protection district and rescue units, emergency medical service providers and emergency management service providers that have jurisdiction over each tower site may evaluate and coordinate their emergency response plans with the

Applicant of the WECS Project.

2. The Applicant, at its expense, shall provide annual training for, and the necessary equipment to, the Operator and local emergency response authorities and their personnel so that they can properly respond to a potential emergency at the WECS Project. Special equipment to be provided includes, but is not limited to, permanently installed rescue equipment such as winches, pulleys, harnesses, etc.
3. The Applicant and the Operator shall cooperate with all local emergency responders to develop an emergency response plan. The plan shall include, at a minimum, 24 hour contact information (names, titles, email addresses, cell phone numbers) for the Applicant and the Operator and at least three (3) designated WECS Project representatives (a primary representative with two (2) alternate representatives, each of whom are on-call "24 hours per day / 7 days per week / 365 days per year"). Any change in the designated WECS Project representative or his/her contact information shall be promptly communicated to the County. The content of the emergency response plan, including the 24-hour contact information, shall be reviewed and updated on an annually basis.
4. Nothing in this section shall alleviate the need to comply with all other applicable life safety, fire / emergency laws and regulations.

C. Water, Sewer, 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.
3. The WECS Project shall comply with existing septic and well regulations as required by the County Health Department and the State of Illinois Department of Public Health.

D. Shadow Flicker

The Applicant must present to the County Board a model study on potential shadow flicker. The Applicant shall appropriately demonstrate to the County Board through industry standard modeling that no occupied community building or non-participating residence will experience an expected duration of 30 hours or more per year. An occupied community building owner or a non-participating participating residence owner may waive this shadow flicker mitigation requirement. Each waiver of the above shadow flicker mitigation requirement shall be set forth in a written waiver executed by the occupied community building owner or non-participating residence owner and filed with the County Recorder of Deeds Office against title to the affected real property.

E. Signage

Signage regulations are to be consistent with ANSI and AWEA standards. A reasonably visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations, and at all entrances to Wind Towers.

F. Drainage Systems

The Applicant, at its expense, will repair, in a prompt and timely manner, all waterways, drainage ditches, agricultural drainage systems, field tiles, or any other private and public infrastructure improvements damaged during construction, maintenance and operation phases of the WECS Project in accordance with the Agricultural Impact Mitigation Agreement.

G. Complaint Resolution

The Applicant shall, at its expense and in coordination with the County, develop a system for logging and investigating complaints related to the WECS Project. The Applicant shall resolve such non-emergency complaints on a case-by-case basis and shall provide written confirmation to the County. All costs and fees incurred by the County in attempting to or resolving complaints shall be reimbursed by the Applicant of the WECS Project. The Applicant shall also designate and maintain for the duration of the WECS Project either a local telephone number or a toll-free telephone number and an email address as its public information / inquiry / and complaint "hotline" which shall be

answered by a customer service representative 24/7 basis. The Applicant shall post the telephone number(s) and email address(es) for the customer service representative(s) in a prominent, easy to find location on their websites and at the WECS Project site on signage.

## VII. LIABILITY INSURANCE AND INDEMNIFICATION

- A. Commencing with the issuance of a WECS Building Permit, the Applicant shall maintain a current general comprehensive liability policy and automobile liability coverage covering bodily injury, death and illness, and property damage with limits of at least Five Million Dollars (\$5,000,000.00) per occurrence and in the aggregate; and, shall further maintain the above-stated lines of insurance from delivery of the "Notice to Proceed by the Applicant under the turbine supply and/or balance of plant construction contract(s) for the WECS Project, in coverage amounts of at least Five Million Dollars (\$5,000,000.00) per occurrence and Twenty Million Dollars (\$20,000,000.00) in the aggregate during the life of the WECS Project. The Applicant shall file the original certificate of insurance upon commencement of project construction prior to the issuance of a WECS Building Permit, corresponding policies and endorsements to be provided within sixty (60) days of issuance, and at each subsequent renewal, at least annually thereafter.
- B. The Applicant (WECS Permittee) shall defend, indemnify and hold harmless the County and its officers, appointed and elected officials, employees, attorneys, engineers and agents (collectively and individually, the "Indemnified Parties") from and against any and all claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses and liabilities whatsoever, including reasonable attorney's fees relating to or arising out of the issuance of the Conditional Use Permit or the construction, operation, maintenance and removal of the WECS and affiliated equipment including, without limitation, liability for property damage or personal injury (including death or illness), whether said liability is premised on contract or on tort (including without limitation strict liability or negligence) or any acts or omissions of the Applicant (WECS Permittee), the Owner or the Operator under this Ordinance or the Conditional Use Permit, except to the extent any such claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses and liabilities arise from the negligence or intentional acts of such Indemnified Parties. This general indemnification shall not be construed as limiting or qualifying the County's other indemnification rights available under the law.

## VIII. DECOMMISSIONING AND SITE RECLAMATION PLAN REQUIRED

- A. Applicant (or Owner, if different from Applicant) must submit a Decommissioning Plan with cost estimation to the County as part of the siting application and provide testimony supporting the calculation of costs provided in said plan during the public hearing on the application. Prior to receiving any building permit for the Commercial Wind Energy Facility, the Applicant or Owner shall provide a Decommissioning Agreement and post the required Financial Assurances for the benefit of the County. The Decommissioning Agreement and Financial Assurances shall comply with 55 ILCS 5/5-12020. Periodically, and as required by the Agricultural Impact Mitigation Agreement, the Owner must update the Decommissioning Plan, cost estimations and provide updated Financial Assurances to the benefit of the County.

## IX. REMEDIES

- A. The Applicant's failure to materially comply with any of the provisions under the Conditional Use Permit, any conditions imposed on the project, and/ or failure to comply with any law or regulation shall be a default and shall be grounds for revocation of the Conditional Use Permit by the County Board.
- B. Prior to implementation of the applicable County procedures for the resolution of default(s), the County Board must first provide written notice to the Applicant and Operator, setting forth the alleged default(s) and provide an opportunity for the Applicant or the Operator to cure the default(s) within a thirty (30) calendar day period from the date of the notice. Should the Applicant commence the cure within that 30-day cure period, and diligently pursues a cure, then the Applicant shall receive an additional sixty (60) days to continue to pursue the cure before the County pursues procedures for the resolution of default. If the default relates to a life safety issue or interference with local, government public safety (police, fire, emergency medical services, emergency management services, 911 dispatch) communications, the Applicant or the Operator shall take all necessary and available commercial measures to immediately cure the default. If the Applicant or Operator cannot cure the default(s) or resolve the alleged default(s) within the cure period, then applicable County ordinance provisions addressing the resolution of such default(s) shall govern.

X. FEE SCHEDULE AND PERMITTING PROCESSES

A. Application Fees

1. Conditional Use Permit fee is as follows:

0-10 Acres	\$500 for the entire parcel
10.01 Acres or more	\$15 per acre for the entire parcel
	+ \$500 = \$???
2. \$.70 per word for Legal Notice, per 55 ILCS 5/5-12009.

B. Building Permit Fees:

1. Prior to the issuance of building permits, the Building Permit Applicant must deposit a Building Permit Fee equating to:

0-10	kilowatts (kW)	\$ 100.00
11-50	kilowatts (kW)	\$ 250.00
51-100	kilowatts (kW)	\$ 500.00
101-500	kilowatts (kW)	\$ 1,000.00
501-1,000	kilowatts (kW)	\$ 2,500.00
1,001 – 2,000	kilowatts (kW)	\$ 5,000.00

Over 2,000 kilowatts (kW) \$ 100.00 for each additional 0—100 kilowatts.

2. The Building Permit shall be valid for 24 months.

C. All Costs to be Paid by Applicant or Owner:

In addition to all fees noted above, the Applicant or Owner shall pay all costs incurred by the County, including but not limited to, those costs associated with all offices, boards and commissions of the County, and third-party costs incurred by the County. This includes, but is not limited to, the direct or indirect costs associated with the hearing, permitting, operations, inspections, decommissioning, litigation, disputes, and/ or negotiations.



## XI. HEARING FACILITATOR

- A. The County may engage the services of a hearing facilitator. The hearing facilitator shall be an independent contractor who shall conduct a hearing in accordance with all applicable rules of the board and the county but has no adjudicatory responsibility other than ruling on requests for continuances, procedural matters, admissibility of evidence and the propriety of any arguments.
- B. The hearing facilitator shall be an attorney, licensed to practice in the State of Illinois. The Applicant shall reimburse the county for the fees and costs charged by the facilitator.

## XII. HEARING FACTORS

- A. The County Board may approve a Commercial Wind Energy Facility Conditional Use Permit application if it finds the evidence complies with state, federal and local law and regulations, and with the standards of this zoning code including the factors listed below. The factors below are applied as a balancing test, not individual requirements to be met.
  - 1. The establishment, maintenance or operation of the WECS Project will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare;
  - 2. The WECS Project will not be injurious to the uses and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values of surrounding properties;
  - 3. The establishment of the WECS Project will not impede the normal and orderly development and improvement of the surrounding properties;
  - 4. Adequate public utilities, access roads, drainage and/or necessary facilities have been or will be provided;
  - 5. Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets;
  - 6. The proposed WECS Project is not contrary to the objectives of the current comprehensive plan of the County (if any); and
  - 7. The WECS Project shall, in all other respects, conform to the applicable regulations of this Ordinance and the zoning

district in which it is located (if a zoning ordinance is in effect), except as such regulations may, in each instance, be modified pursuant to the recommendations of and approved by the County Board.

- B. Conditional Use Permit Conditions and Restrictions. The County Board may stipulate conditions, guarantees and restrictions, upon the establishment, location, construction, maintenance, and operation of the WECS Project as are deemed necessary for the protection of the public interest and to secure compliance with the standards and requirements of this Ordinance.
- C. Revocation.
  - 1. In any case where a Conditional Use Permit has been approved for a WECS Project, the Applicant shall apply for a WECS Building Permit from the County and all other permits required by other government or regulatory agencies to commence construction, and commence and actively pursue construction of the Project within thirty-six (36) months from the date of the granting of the Conditional Use Permit. If the Applicant fails to apply for a WECS Building Permit from the County and all other permits required by other government or regulatory agencies prior to construction and/or fails to commence and actively pursue construction of the Project within the thirty-six (36) month period, then without further action by the County Board, the Conditional Use Permit authorizing the construction and operation of the WECS Project shall be automatically revoked and void. Upon written request supported by evidence that the Applicant has diligently pursued issuance of all necessary government and regulatory permits for the Project required to commence construction and that any delay in commencement of construction of the Project is due to conditions out of his/her/its control, the County Board, in its sole discretion, may extend the above thirty-six (36) month period by passage of an ordinance that amends the Conditional Use Permit.
  - 2. The Conditional Use Permit shall be subject to revocation if the Applicant dissolves or ceases to do business, abandons the WECS Project or the WECS ceases to operate for more than twelve (12) consecutive months for any

reason.

3. Subject to the provisions of Article IX (Remedies), a Conditional Use Permit may be revoked by the County Board if the WECS Project is not constructed, installed and/or operated in substantial conformance with the County-approved Project plans, the regulations of this Ordinance and the stipulated Conditional Use Permit conditions and restrictions.

D. Transferability; Owner or WECS Permittee. The Applicant shall provide written notification to the County Board at least thirty (30) days prior to any change in ownership of a WECS Project of any such change in ownership. The phrase "change in ownership of a WECS Project" includes any kind of assignment, sale; lease, transfer or other conveyance of ownership or operating control of the Applicant, the WECS Project or any portion thereof. The Applicant or successors-in-interest or assignees of the Conditional Use Permit, as applicable, shall remain liable for compliance with all conditions, restrictions and obligations contained in the Conditional Use Permit, the provisions of this Ordinance and applicable County, state and federal laws.

E. Modification. Any modification of a WECS Project that alters or changes the essential character or operation of the WECS Project in a way not intended at the time the Conditional Use Permit was granted, or as subsequently amended, shall require a new Conditional Use Permit. The Applicant or authorized representative, shall apply for an amended Conditional Use Permit prior to any modification of the WECS Project.

F. Permit Effective Date: The Conditional Use Permit shall become effective upon approval of the ordinance by the County Board.

### XIII. 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 Knox County. These regulations are not intended to repeal, abrogate, annul or in any manner interfere with existing regulations or laws

of the Knox County nor conflict with any statutes of the State of Illinois.

#### XIV. 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.

#### XV. EFFECTIVE DATE

This Ordinance shall be in full force and effect from and after its passage, publication and approval as required by law.

**Reviewed and determined consistent with the Knox County Zoning Ordinances and recommended for approval by the Zoning Board of Appeals.**

\_\_\_\_\_  
**Chairperson** **Dated:** \_\_\_\_\_

**Reviewed and approved by the Knox County State's Attorney**

\_\_\_\_\_  
**Knox County State's Attorney** **Dated:** \_\_\_\_\_

**Approved by the Knox County Board**

\_\_\_\_\_  
**Chairperson** **Dated:** \_\_\_\_\_

\_\_\_\_\_  
**County Clerk** **Dated:** \_\_\_\_\_

**Rejected by the Knox County Board**

\_\_\_\_\_  
**Chairperson** **Dated:** \_\_\_\_\_

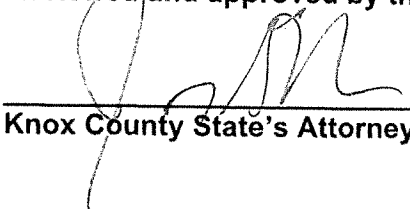
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**County Clerk** **Dated:** \_\_\_\_\_

## Resolution 2023-038

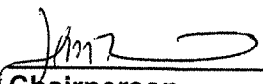
Reviewed and determined consistent with the Knox County Zoning Ordinances and recommended for approval by the Zoning Board of Appeals.


  
Chairperson \_\_\_\_\_ Dated: 6/30/23

Reviewed and approved by the Knox County State's Attorney

  
Knox County State's Attorney \_\_\_\_\_ Dated: 6/30/23

Approved by the Knox County Board

  
Chairperson \_\_\_\_\_ Dated: 6/30/23

  
County Clerk \_\_\_\_\_ Dated: 6/30/2023

Rejected by the Knox County Board

\_\_\_\_\_  
Chairperson \_\_\_\_\_ Dated: \_\_\_\_\_

\_\_\_\_\_  
County Clerk \_\_\_\_\_ Dated: \_\_\_\_\_