

Wind Energy

ARTICLE XL - WIND ENERGY

AN ORDINANCE REGULATING THE DEVELOPMENT OF WIND ENERGY SYSTEMS

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40.0 AUTHORITY

This ordinance is adopted pursuant to authority granted by ILCS Chapter 55 Counties Division 5-12 Zoning and Section 5/5-1063 Building Construction, Alteration, Maintenance.

40.1 PURPOSE

The purpose of this ordinance is to preserve and protect public health and safety without significantly increasing the cost or decreasing the efficiency of a wind energy system and to allow for the orderly development of land, protect property values and esthetic conditions within the county. This ordinance does not repeal, abrogate, annul, impair, or interfere with any existing ordinance.

40.2 APPLICABILITY

This ordinance applies to all unincorporated lands within the boundaries of Rock Island County.

40.3 DEFINITIONS

In this section the following definitions shall apply:

Agricultural Wind System- A wind system that has a nameplate capacity of less than the average electrical usage for the previous 12 months on the specific farm being served. A wind energy system that creates more energy than is needed for agricultural uses will have the excess sold back to the grid, and thus, is NOT exclusively for agricultural uses, and is NOT exempt from the requirements of this ordinance.

Board- The Zoning Board of Appeals.

Code Administrator- The Zoning/Building Administrator/ the Director of Zoning & Building.

County Board- The Rock Island County Board.

County Engineer- The Rock Island County Engineer.

Department- The Zoning/Building Department

Large Wind System- A wind energy system that has a nameplate capacity of more than 50 kilowatts, a total height of more than 100 feet, a blade diameter of more than 30 feet, and one or more wind towers with turbines.

Small Wind System- A wind energy system that has a nameplate capacity of 50 kilowatts or less, a total height of 100 feet or less, a blade diameter of 30 feet or less, and one OR MORE wind towers with turbines.

Total Height- The vertical distance from ground level to the tip of a wind turbine blade when the tip is at its highest point.

Wind Energy System- Equipment that converts and then stores or transfers energy from the wind into usable forms of energy and includes any base, blade, foundation, generator, nacelle, rotor, tower, transformer, turbine, vane, wire, or other component used in the system.

Wind Farm System- A wind energy system that includes two or more wind towers.

Wind Tower-The monopole, freestanding, or guyed structure than supports a wind turbine generator.

Building Code- The Rock Island County Building Code as amended.

Comprehensive Plan- The Rock Island County Land Use Plan as amended.

Zoning Ordinance- The Rock Island County Zoning Ordinance as amended.

40.04 Standards.

a. Location

- 1.** A large wind energy system may only be located in areas that are zoned AG-1 Agricultural Preservation District, AG-2 General Agricultural District, I-1 Light Industrial District or I-2 General Industrial District, with a Special Use Permit and Building Permits. A small wind system may be located in any zoning map district with special use and building permits.
- 2.** A large wind energy system shall be located 1000 feet or more from an occupied structure on an adjoining property and 1.1 times total tower height or more from occupied structure on subject property, measured from wind tower base.

3. A small wind energy system shall be located 1.1 times total tower height or more from an occupied structure on adjoining property and 80% total tower height or more from occupied structure on subject property measured from wind tower base.

b. Setbacks

1. A small wind system must be set back from all property lines of the parcel on which it is located and from any right-of-way a distance 1.1 times total tower height measured from wind tower base.
2. A large wind system must be set back minimum distances as follows:
 - A. 1.1 times total tower height from any and all public/private right-of-way lines measured from wind tower base.
 - B. 100 feet from all other property lines measured from the tip of the blade when located parallel with the ground.

c. Spacing and Density

A wind energy system shall be separated from any other wind energy system by a minimum of 200 feet measured from the tips of the blades when the blades are parallel with the ground.

d. Structure

A wind energy system shall be of monopole construction to the extent practicable. If monopole construction is not practicable, a wind tower must be of freestanding construction to the extent practicable. If monopole or freestanding construction is not practicable, a wind tower may be guyed.

e. Height

The total height of a wind energy system shall be 500 feet or less.

f. Clearance

The vertical distance from ground level to the tip of a wind turbine blade when the blade is at its lowest point must be at least 25 feet.

g. Access

All wind towers located in a wind energy system, including any climbing aids, shall be secured against unauthorized access by means of a locked barrier or security fence 6' in height.

h. Electrical Wires

All electrical wires associated with a wind energy system, other than wires necessary to connect the wind turbine to its base and to overhead collection lines, shall be located underground. The Board may vary this requirement upon proof of hardship.

h. Lighting

As required by the Federal Aviation Administration. Required lighting must comply with FAA minimum requirements and, whenever possible, be at the lowest intensity allowed using red lights at night. If more than one lighting alternative is available, the alternative that causes the least visual disturbance must be used.

i. Equipment

UNLESS LOCATED UNDERGROUND, any electrical equipment associated with a wind energy system shall be located under the sweep area of a blade assembly to the extent practicable.

i. Appearance, Color and Finish

The exterior surface of any visible components of a wind energy system must be a non-reflective, neutral color. Wind towers and turbines in an established wind farm system that are located within 1000 feet of each other must be of uniform design, including tower type, color, number of blades, and direction of blade rotation to the extent practicable.

j. Signs

No wind turbine, tower, building, or other structure associated with a wind energy system may be used to advertise or promote any product or service. No word or graphic representation, other than appropriate warning signs and owner identification, may be placed on a wind turbine, tower, building, or other structure associated with a wind energy system so as to be visible from any public road.

40.05 Permit Requirements.

a. Special Use Permit

A special use permit approved by the County Board is required for each wind energy system except for a Agricultural Wind System as defined in this section. See this Ordinance, Article XI, section 6.3, Special Uses.

b. Building Permit

A building permit is required for the installation of each wind energy system except for an Agricultural Wind System as defined in this section. See Rock Island County Building Code as amended.

c. Expiration

A Special Use Permit issued pursuant to this ordinance expires if:

1. The wind energy system is not installed and functioning within 5 years from the date the permit is issued; or
2. The wind energy system is out of service or otherwise unused for a continuous 12-month period. See 40.06 of this section. The Board may grant reasonable extensions to the 5 year and 12 month deadlines provided action to amend the inactivity has been active and consistent though the time period involved. For purposes of this section, placing the system for sale or intending to use the system at a future date does NOT constitute active and consistent activity.

d. Fees

1. The application for a special use permit must be accompanied by the fee required for each wind energy system.
2. The application for a building permit must be accompanied by the fee required for each wind energy system.
3. An Agricultural Wind System as defined in this section is exempt from zoning and building fees.

e. Financial Assistance

1. REASONABLE EVIDENCE of financial ability to construct, maintain and decommission the Wind Energy System is a condition precedent to the issuance of any special use or building permit under this ordinance.
2. Rock Island County and/or the property owner leasing land for a wind energy system may require a performance bond, surety bond, escrow account, letter of irrevocable letter of credit or other financial assurance to Rock Island County and/or the property owner for each wind energy system that guarantees the performance of the restoration requirement set forth in Section 40.06.

40.06 Restoration Requirement

- a. A wind energy system that is out of service for a continuous 12-month period will be deemed to have been abandoned. The Code Administrator may issue a Notice of Abandonment to the owner of a wind energy system that is deemed to have been abandoned. The Code Administrator shall withdraw the Notice of Abandonment if the Board approves a reasonable extension based on hardship conditions. Efforts to operate the system must be shown to have been active and consistent though the time period involved. For purposes of this section, placing the system for sale or intending to use the system at a future date does NOT constitute active and consistent activity.

- b. The owner of a wind energy system shall provide the Code Administrator with a written Notice of Termination of Operations if the operation of a wind energy system is terminated.
- c. Within 8 months of receipt of Notice of Abandonment or within 8 months of providing Notice of Termination of Operations, the owner of a wind energy system must:
 - 1. Remove all wind turbines, aboveground improvements, and outdoor storage; and
 - 2. Remove all foundations, pads, and underground electrical wires to a depth of 4 feet below the surface of the ground; and
 - 3. Remove all hazardous material from the property and dispose of the hazardous material in accordance with federal and state law.
 - 4. Failure to comply with any of the conditions or restrictions imposed on a special use permit shall be deemed a violation of the Zoning Ordinance.
- d. All Code Administrator determinations may be appealed to the Board.

40.07 Special Use Permit Procedure.

- a. Special use permit applications shall be submitted to the Code Administrator. The application must be on a form approved by the Code Administrator and must be accompanied by 10 copies of a scaled drawing, other descriptive information sufficient to enable the Committee and Board to determine whether the requirements of this ordinance will be satisfied, and such other information as may be specified on the application form. The Code Administrator will review the application materials for completeness and may request that the applicant provide additional information. When the Code Administrator determines that the application is complete, the Code Administrator will forward it to the Board.
- b. The Board will conduct a meeting and hearing on the application within 60 days after application submittal and minimum 15 day public notice. Following the public meeting and hearing the Board will submit recommendations and finding of facts to the County Board.
- c. The County Board may grant a special use permit if it determines that the requirements of this ordinance are met and that granting the permit will not unreasonably interfere with the orderly land use and development plans of the county. Both the Board and County Board may include conditions in the permit as provided if those conditions preserve or protect the public health, safety and property values. Both the Board and County Board may consider the following factors when setting conditions:
 - 1. Proposed ingress and egress.
 - 2. Proximity to transmission lines to link the system to the electric power grid.
 - 3. Number of wind turbines and their location.
 - 4. Nature of land use on adjacent and nearby properties.

5. Location of other wind energy systems in the surrounding area.
 6. Surrounding topography.
 7. Proximity to residential structures, residential zoning districts, or areas identified for future residential use.
 8. Design characteristics that may reduce or eliminate visual obtrusiveness.
 9. Possible adverse effects on migratory birds, raptors, and other animals and wildlife.
 10. Possible adverse effects of stray voltage, interference with broadcast signals, shadow effect, and noise.
 11. Impact on the orderly development, property values, and esthetic conditions within the county.
 12. Recommendations of interested parties that may be affected by the wind energy system.
 13. Any other factors that are relevant to the proposed system.
- d. The Board may consider variances to one or more of the factors. See Rock Island County Zoning Ordinance Article XI, Section 6.0, Variances.
 - e. The Committee and Board recommendations, finding of facts and any conditions will be recorded in the minutes and forwarded to the County Board for final determination.
 - f. The County Board final decision to approve or reject the special use permit application may be appealed to the Circuit Court.

40.08 Building Permit Procedure

- a. Building permit applications shall be submitted to the Code Administrator. The application must be on a form approved by the Code Administrator and must be accompanied by two copies of a drawing that shows the proposed location and distance of the wind energy system with reference to the property lines of the parcel on which it is located; any residence, business, or public building on an adjacent parcel; the right-of-way of any public road that is within 500 feet; and such other information as may be specified on the application form. Construction plans prepared and sealed by a structural engineer licensed to practice in Illinois stating and illustrating compliance with the Rock Island County Building Code as amended will be required for each wind energy system. Special inspections by approved 3rd party inspection agencies will be required and costs to be paid directly from the developer in addition to all other necessary fees. A copy of the FAA permit for lighting, if necessary, will also be required.
- b. The Code Administrator should issue a permit or deny the application within one month of the date on which the application is received.
- c. The Code Administrator will issue a building permit for a wind energy system if the application materials show that the proposed tower location meets the requirements of this ordinance, building code and the special use permit issued by the County Board.
- d. If the application is approved, the Code Administrator will return one copy of the drawing with the building permit and retain the other copy with the application.

- e. If the application is rejected, the Code Administrator will notify the applicant in writing and provide a written statement of the reason why the application was rejected.
- f. The building permit must be conspicuously posted on the premises so as to be visible to the public at all times until construction or installation of the tower is complete.
- g. All Code Administrator determinations may be appealed to the Board.

40.09 Signal Interference.

The owner of a wind energy system must take such reasonable steps as are necessary to prevent, eliminate, or mitigate any interference with cellular, radio or television signals caused by the wind energy system.

40.10 Violations.

It is unlawful for any person to construct, install, maintain, modify, or operate a wind energy system that is not in compliance with this ordinance or with any condition contained in a special use or building permit issued pursuant to this ordinance. See applicable Zoning Ordinance, Building Code and ILCS sections.

40.11 Administration and Enforcement.

- a. This ordinance shall be administered by the Code Administrator.
- b. The Code Administrator may enter any property for which a special use or building permit has been issued under this ordinance to conduct an inspection to determine whether the conditions stated in the permit have been met as specified by statute, ordinance and code.

40.12 Penalties.

- a. Zoning – petty offense. Maximum \$500 fine with each day a violation continues uncorrected constituting a separate offense. Building – petty offense. Maximum \$500 fine with each day a violation continues uncorrected constituting a separate offense.
- b. Nothing in this section shall be construed to prevent the county from using any other lawful means to enforce this ordinance.

40.13 County Highway and Township Road Agreements.

Each wind energy system shall have a written agreement with County Engineer and respective Township Highway Commissioner(s) regarding use of county/township road, bridges and right-of-way. Performance/surety bonds or other financial assurance documents may be required to guarantee the performance of the road agreements.

40.14 Wind Energy System Owner/Property Owner Restoration Agreement.

Each wind energy system lease shall have a signed agreement between wind energy system owner and property owner regarding restoration requirements as discussed in this ordinance.

