

CHICKASAW COUNTY ORDINANCE #VI-6

AN ORDINANCE REGULATING THE PLACEMENT, OPERATION, AND REMOVAL OF COMMERCIAL WIND ENERGY CONVERSION SYSTEMS

SECTION I. PURPOSE

The purpose of this Ordinance is to provide a regulatory means for the construction, operation and potential decommissioning of Commercial Wind Energy Conversion Systems (WECS) in Chickasaw County. The intent of the regulations found within this ordinance is to promote the safe, effective and efficient use of WECS while preserving the public health, safety and welfare.

SECTION II. APPLICABILITY

This ordinance, and the requirements found within, shall apply to all Commercial WECS projects for which on-site construction activities begin after the effective date of this ordinance.

SECTION III. PERMIT APPLICATION REVIEW / APPROVAL PROCESS

- A. The owner/developer shall provide the completed application/permit with all additional required information to the Land Use Administrator with the appropriate fees.
- B. Within thirty (days) the Planning Commission shall meet to consider the application/permit for recommendation to the Board of Supervisors.
- C. Within thirty (30) days of recommendation by the Planning Commission, the Board of Supervisors shall schedule a public hearing regarding the permit/application request. Notice shall be given to the public no less than ten (10) days and not more than twenty (20) days prior to the public hearing in the official newspaper(s) of Chickasaw County.
 1. Notice shall also be given no less than ten (10) days and not more than twenty (20) Days prior to the public hearing by ordinary mail to all property owners located within 2,640 feet (1/2 mile) of each proposed wind energy device for which the permit is requested.
- D. The Board of Supervisors may prescribe additional appropriate conditions and safeguards in conformity with this ordinance and other ordinances of the county. Said additional conditions and safeguards shall be made as an addendum to the permit.
- E. Approval of the permit for a wind energy device or multiple wind energy devices shall expire if continuous construction or operation does not commence within two (2) years from the date of approval by the Board of Supervisors, unless the Board of Supervisors specifically grants a longer period of time for the validity of the permit which approval shall not be unreasonably withheld. "Continuous construction or operation" means that once such construction or operation begins, it is not inactive for any period longer than six (6) months.

SECTION IV. DEFINITIONS

- A. "Aggregated Project" shall mean projects that are developed and operated in a coordinated fashion, but may have multiple entities separately owning one or more of the individual WECS within the larger project. Associated infrastructure such as power lines and transformers that service the facility may be owned by a separate entity but also included as part of the aggregated project.
- B. "Applicant" shall mean the person or entity filing the application under this ordinance.
- C. "Construction" shall mean on-site physical activity that includes breaking of the ground for footings or foundations of any structure to be located on the site to the final completion of all structures.
- D. "Decommissioning / Discontinuance" shall mean the process of terminating the use and removal of all or part of a large Wind Energy Facility by the owner or the assigns of the large WECS.
- E. "Fall Zone" shall mean the area defined as the furthest distance from the tower base, in which a monopole, freestanding, or tower could collapse in the event of a structural failure. This area or distance is commonly similar to the total height definition.
- F. "Feeder Line" shall mean 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 electrical power grid. In the case of interconnection with high voltage transmission systems the point of interconnection shall be the substation serving the WECS.
- G. "Hub Height" shall mean the distance measured from ground level to the center of the turbine hub.
- H. "Landowner Non-Participating" shall mean any landowner not under agreement with the Wind Energy Facility owner or operator.
- I. "Landowner Participating" shall mean a landowner under a lease or other property agreement with the Wind Energy Facility owner or operator.
- J. "Occupied Building" shall mean a residence, school, hospital, church, public library or other building used for private or public gathering that is occupied or in use when the application is submitted under this ordinance.
- K. "Meteorological Tower or MET" shall mean those towers which are erected primarily to measure wind speed and directions plus other data relevant to site WECs. Meteorological towers do not include towers and equipment used by airports, the Iowa Department of Transportation, or other similar applications to monitor weather conditions.
- L. "Micro-WECS" shall mean a WECS of one (1) kilowatt name plated generating capacity or less and utilizing supporting towers of forty (40) feet or less.

- M. "Nacelle" shall mean the key components of the wind turbine, including the gearbox, yaw system and electrical generator.
- N. "Operator" shall mean the entity responsible for the day-to-day operation and maintenance of the Wind Energy Facility.
- O. "Owner / Developer" shall mean the individual or entity that intends to own and operate the Wind Energy Facility, including their respective successors and/or assigns. This shall also mean any entity or entities having an equity interest in the Wind Energy Facility, including their respective successors and assigns.
- P. "Property Line" shall mean the boundary line of the area over which the owner/developer has legal control for the purposes of installation of a WECS. This control may be attained through fee simple title ownership, easement, or other appropriate contractual relationship between the project owner/developer and the landowner.
- Q. "Public Conservation Lands" shall mean land owned in fee simple title by County, State or Federal Agencies and managed specifically for conservation purposes, including but not limited to State Wildlife Management Areas, State Parks, State Scientific and Natural Areas, Federal Wildlife Refuges, Hunting Preserves and Waterfowl Production Areas. For the purposes of this Ordinance, public conservation lands will also include lands owned in fee simple title by non-profit conservation organizations. Public conservation lands do not include private lands upon which conservation easements have been sold to public agencies or non-profit conservation organizations.
- R. "Public Road" shall mean a full-passage Right-Of-Way intended for use by the public and is held by easement or fee simple title.
- S. "Rotor Diameter" means the cross-sectional dimension of the circle swept by the rotating blades.
- T. "Shadow Flicker" shall mean the visible flicker effect when rotating turbine blades cast shadows on the ground or nearby structures causing the repeating pattern of light and shadow.
- U. "Site" shall mean the parcel(s) of land where a Wind Energy Facility is to be placed. The Site can be publicly or privately owned by an individual or group of individuals controlling single or adjacent properties. Where multiple lots are in joint ownership or control, the combined lots shall be considered as one for purposes of applying any or all setback requirements.
- V. "Substation" shall mean any electrical facility designed to convert electricity produced by wind turbines to a voltage greater than thirty-five thousand (35,000) volts (35 kilovolts) for interconnection with high voltage transmission lines. High voltage transmission lines shall be located outside of the road right of way.
- W. "Termination of Use" shall mean the point in time at which a Wind Energy Facility owner provides notice to Chickasaw County that the Wind Energy Facility or individual wind turbines are no longer used for producing electricity unless due to a temporary shutdown.

for maintenance and repairs. Such notice of Termination shall occur no less than thirty (30) days after actual termination of use.

- X. "Total Height" shall mean the distance measured from the ground level to the tip of a wind generator blade when the tip is at its highest point.
- Y. "Tower" means the monopole, freestanding, or guyed structure that supports the wind generator.
- Z. "Transmission Lines" shall mean those electrical power lines that carry voltages of at least sixty-nine thousand (69,000) volts (69 kilovolts) and are primarily used to carry energy over medium to long distances rather than directly interconnecting and supplying energy to retail customers.
- AA. "WECS" shall mean Wind Energy Conversion System(s). That is, an electrical generating facility comprised of one or more wind turbines and accessory facilities, including but not limited to: power lines, transformers, substations and meteorological towers that operate by converting the kinetic energy of wind into electrical energy. The energy may be used onsite and/or distributed into the electrical grid.
- BB. "Wind Energy Device" means equipment that converts and then stores or transfers energy from the wind into usable forms of energy. This equipment includes but not limited to any base, blade, foundation, generator, nacelle, rotor, tower, transformer, wire, inverter, batteries or other components used in the system. The term wind energy device is often referred to as wind towers, wind turbines, wind generators, windmills or other wind energy conversion systems.
- CC. "Wind Energy Conversion System Large" means a system that generates electricity or performs other work consisting of one or more wind turbines with a total name plate generating capacity of one hundred (100) kilowatts or more. These systems are often referred to as "Commercial WECS".
- DD. "Wind Energy Conversion System Small" means a system that generates electricity or performs other work consisting of one or more wind turbines with a total name plate generating capacity of less than one-hundred (100) kilowatts or more. These systems are often referred to as "Non-Commercial WECS".
- EE. "Wind Energy Facility" shall mean an electric generating facility, whose main purpose is to supply electricity, consisting of one or more Wind Turbines and other accessory structures and buildings, including substations, meteorological towers, electrical infrastructure, transmission lines and other appurtenant structures and facilities. For purposes of this Ordinance, the term does not apply to roof-mounted or building integrated roof mounting systems.

SECTION V. APPLICATION / PERMIT

All proposed WECS projects shall make application to the Chickasaw County Planning Commission through the Chickasaw County Land Use Administrator.

No WECS or wind turbine shall be constructed, erected, converted, installed, reconstructed, enlarged, located, relocated, structurally altered, or otherwise developed including the placement of additional buildings and appurtenances and being in full compliance with the terms of this section and other applicable codes, regulations, and policies adopted by the County, State, or Federal Government.

A. Fees

1. All checks are to be made payable to Chickasaw County Planning Commission
2. For each New WECS site a fee of \$500.00 shall accompany the application.
3. For modifications to an existing site where physical structural changes are being made a fee of \$250 shall accompany the application.
4. No fee or application is required for like replacements, repairs or maintenance.
5. All fees are non-refundable.

B. PERMIT INCLUSIONS

1. Applicant's information including name and contact information
2. Contractor's information including name and contact information, if not known at time of application, is to be provided once established.
3. Situs information including situs address, parcel #, and legal description
4. General description of work to be performed
 - a. Approximate nameplate generating capacity
 - b. Number of proposed sites
 - c. Projected cost
 - d. Projected completion date
5. Physical characteristics
 - a. Tower Height
 - b. Rotor Diameter
 - c. Total Height
 - d. Lighting
 - e. Foundation specifications
 - f. Wind energy device manufacturer and model
6. Engineer's certification(s) of wind turbines from manufacturer.
7. Documentation of land ownership or legal control of property
8. Site Plan/Map reflecting, to the extent known at the time of application submission,

the following:

- a. General location of project facilities.
 - b. Elevations
 - c. Compliance with the setback requirements of this Ordinance.
 - d. Location of Chickasaw County conservation areas within 1,320 feet of the wind turbine site(s).
 - e. Location of all known communication towers within a 2-mile radius of the proposed wind turbine(s).
9. An acoustical analysis
 10. Copies of any/all F.A.A. application(s) for No Hazard Determinations
 11. Description of potential impacts on any nearby large and small WECS and wind resources on adjacent properties.
 12. A report of findings by a qualified professional on the potential, if any, impact on the migratory patterns and nesting areas for birds and bats, and identification of endangered species within one (1) miles of the wind turbine site(s).
 13. The applicant, owner or operator shall submit a copy of the site plan and Emergency Action Plan to the Chickasaw County Emergency Management Administrator.
 14. Certificate of insurance with a minimum of \$10,000,000.00 liability coverage per incidence, per occurrence shall be required for the life of the facility.

SECTION VI. AGENCY NOTICE / REVIEW

Prior to submitting an application/permit for a commercial wind energy device/facility, whether singularly or for multiple wind energy facilities/devices, the project owner/developer shall be responsible for notifying applicable governmental and community agencies and allowing each agency sixty (60) days to do a preliminary review. Documentation of notification of these agencies, and any reports from the agencies are to be provided to the county when the application is submitted. If any agency does not act within the sixty (60) days, the plan may be deemed approved by the agency that failed to act upon proof of notice. The Land Use Administrator will meet with the applicant/owner/developer and agree to a list of applicable agencies to which Chickasaw County will require notice from prior to Chickasaw County considering an application for a specific wind energy project. Those agencies may include, but not be limited to, the following:

- A. Federal Aviation Administration
- B. Federal Communications Commission
- C. Iowa Department of Transportation
- D. Army Corps of Engineer's
- E. Iowa Utilities Board
- F. U.S. Fish and Wildlife
- G. U.S. Department of Agriculture (Local FSA and NRCS)
- H. Environmental Protection Agency

- I. Iowa Department of Natural Resources
- J. Office of State Archaeologist
- K. Bureau of Land Management
- L. Chickasaw County Engineer's Office
- M. Chickasaw County Conservation Board
- N. Chickasaw County Environmental Health Office

SECTION VII. REGULATIONS / STANDARDS

A. Location

1. Devices/facilities shall not be permitted where a current incorporated city exercises its 2-mile radius zoning authority.

B. Height

1. There is no limitation on the height, either total height or hub height, or height of substation components, except that which may be exercised by state or federal agencies.
2. The height shall be subject to FAA requirements relative to area airports that may be imposed.

C. Setbacks

1. From Road Right-of-Ways, 1.10 times the total height.
2. From other Right-of-Ways such as railroads, power lines, etc., the lesser of 1.10 times the total height or the distance of the fall zone as certified by a professional engineer plus 10 feet.
3. From adjacent property lines of non-participating landowners, 1.10 times the total height.
4. From neighboring Dwellings, Commercial structures, and public service facilities, all of which are able to be inhabited or under construction at the time of this ordinance, a distance of 1,200 feet or two (2) times the total height.
5. Agricultural Use Structures, such as livestock confinement facilities and dairy operations (but not including grain bins or silos), existing or under construction at the time of Application submittal, the fall zone as certified by a professional engineer plus 10 feet or 1.10 times the total height.
6. From Public Conservation Lands such as wildlife habitat, 600 feet.

D. Spacing

1. This will vary depending on common industry practice and manufacturers specifications.

E. Access

1. Each site shall have an assigned situs address.
3. Each site shall be secured so as to prevent unauthorized access.

F. Clearance

1. The minimum distance between the ground level and any part of the rotor blades or airfoils shall be thirty (30) feet.

G. Lighting

1. Any wind energy device/facility shall not be artificially lighted unless such lighting is required by the Federal Aviation Authority.
2. Where lighting is required by the FAA, lighting shall adhere to the FAA requirements. Red strobe lights shall be used while red pulsating incandescent lights should be avoided.

H. Electrical Wires

1. All communication and feeder lines, equal to or less than 34.5 kV in capacity, installed as part of a WECS shall be buried to a depth not less than four (4) feet.

I. Appearance, Color, Finish

1. Wind Turbines and Towers shall be painted a neutral color.
2. Blades may be painted black to facilitate deicing.
3. Accessory structures shall be painted a neutral color or that which will blend to the natural setting and existing environment.
4. All finishes shall be non-reflective.

J. Climbing Apparatus

1. Wind Turbine Towers shall not be climbable on the exterior up to fifteen (15) feet above ground level.
2. All wind turbine tower access ladders must be located inside of the tower.
3. All climbing apparatuses shall only be accessible to those associated with the WECS.

K. Signage

1. Each site shall have a sign identifying the following for emergency purposes:
 - a. Owner's Name.
 - b. Contact name and phone number.
2. Wind Turbines shall not be used for commercial advertisement purposes.

L. Sound

1. No WECS shall exceed fifty-five (55) decibel A (dBA) for any period of time as measured at the nearest occupied dwelling, commercial structure, or public service facility.
2. The ambient noise level shall be measured at the exterior of potentially affected existing dwellings, commercial structures and public service facilities.
3. In the event audible noise due to WECS operations contains a steady pure tone, whine, screech or hum for more than five (5) minutes per hour in succession, the standards for audible noise set forth in this section shall be reduced by five (5) dBA.
4. In the event the noise levels resulting from the WECS exceed the criteria listed in this section, a waiver to said levels may be granted by the Board of Supervisors provided that the following has been accomplished:
 - a. Written consent from the affected property owner(s) has been obtained, that they are aware of the noise level limitations imposed by this Ordinance, and that an agreed to noise level between the WECS owner and the affected property owner is stated and agreed to.
 - b. Also that if the agreement is to be carried forward to succeeding owners of the

affected property, a copy of the consent form noted above and a permanent noise impact easement shall be recorded in the Chickasaw County Recorder's Office.

M. Flicker

1. WECS owners shall limit shadow flicker to any off-site dwelling to 30 hours annually.

N. Electromagnetic Interference

1. Any wind energy device/facility shall not cause interference with existing radio, telephone or microwave signals.
2. If it is determined that interference is being created due to the wind energy device/facility, the owner shall take the necessary corrective measures to eliminate the interference.
3. No wind energy device/facility shall be located within the microwave path of an emergency communication tower.

O. Code Compliance

1. Any wind energy device/facility shall comply with all applicable state construction and electrical codes, and the National Electrical Code.

P. Utility Notification and Interconnection

1. Wind energy devices/facilities that connect to a commercial electrical utility shall comply with all local, state and federal regulations regarding the connection of energy generation facilities.

Q. Ownership/Management Changes

1. Notification shall be given to the Land Use Administrator upon change of ownership of a WECS.
2. The owner of a WECS shall give notice to the Land Use Administrator of any change in the management.

R. Survey(s) providing for, but not limited to, the following

- a. Location of property lines
- b. Location of all proposed improvements including turbines, electrical wires, accessory structures, including all relative distances.
- c. Interconnection points with the electrical grid.
- d. All utility easements, ingress/egress easements, and including all temporary construction easements.
- e. Plan for site grading, erosion control, and storm water drainage. A storm water pollution prevention plan (SWPPP) if required shall be submitted to the County Engineer for review and approval prior to granting a permit to construct.
- e. The survey is to be recorder in the Chickasaw County Recorder's Office.

SECTION VIII. DISCONTINUATION / DECOMMISSIONING

- A. A decommissioning plan shall be filed with each application outlining the proposed financing and means/methods to adequately remove such structure(s) upon becoming a

discontinued use. Any wind energy device/facility that is out-of-service for a continuous one (1) year period will be deemed to have been abandoned and discontinued for use. The decommissioning plan shall require at minimum the following:

1. The structure(s) shall be removed within one (1) year that the wind energy device became a discontinued use.
2. Any and all foundations shall be removed to a minimum depth of four (4) feet below grade, or in total if less than four (4) feet due to location of bedrock.
3. Any remaining foundation shall be identified on a survey and recorded in the Chickasaw County Recorder's Office.
4. The site shall be stabilized, graded, seeded and cleared of any and all debris by the owner of the WECS device/facility or its assigns.
5. Any access roads shall be removed, cleared and graded by the owner of the WECS device/facility or its assigns, unless the owner of the parent parcel desires to keep the access road in place. Chickasaw County at no time will be assumed to take ownership or maintenance of any access road unless through official action by the Board of Supervisors.
6. Any expenses related to the discontinuance/decommissioning and removal shall be the responsibility of the WECS device/facility owner, including any expenses related to releasing any easements.
7. Removal shall conform to any contract between the owner of the parent parcel and the owner of the WECS device/facility, in addition to the requirements set forth in this Ordinance.

SECTION IX. VIOLATION / PENALTY

- A. It shall be unlawful for any person, firm or corporation to construct, install, or operate a wind energy device/facility that is not in compliance with this Ordinance or with any special conditions noted.
- B. All wind energy devices/facilities shall be maintained in operational condition at all times, subject to reasonable maintenance and repair outages.
 1. Operational condition includes meeting all noise requirements and other conditions stated in this Ordinance or otherwise agreed to.
 2. Should a wind energy device/facility be damaged, become inoperable, or be found to be in violation of a condition stated in this Ordinance or that which was otherwise agreed to, the owner or assigns shall remedy the condition within three (3) months after written notice from Chickasaw County. Upon request of the owner or assigns, and for good cause, the Land Use Administrator may grant a reasonable extension of time to remedy the condition.
 3. If the wind energy device/facility is not repaired, made operational, or brought into compliance after said notice, the Board of Supervisors may, after a public meeting at which the owner or operator shall be given opportunity to be heard and present evidence, including a plan to come into compliance, either order remedial action within a specified timeframe or order the removal of the wind energy device/facility within three (3) months.
 4. Chickasaw County shall have the right to use the irrevocable letter of credit, bond, or cash escrow to cover the costs associated with the removal of a wind energy device/facility not removed within the specified timeframe.
 5. Any wind energy device/facility that does not meet the requirements of this

Ordinance, including, but not limited to those dealing with noise, height, setback, appearance, or other conditions found within this Ordinance, shall be deemed to be an unlawful structure and shall provide grounds for consideration as being a discontinued use with the potential for removal.

SECTION X. LIABILITY

- A. Chickasaw County shall be fully released of any liability associated with any WECS, device or facility built in the unincorporated areas of Chickasaw County.

SECTION XI. REPEALER

- A. All Ordinances or parts of Ordinances in conflict with the provisions of this Ordinance are hereby repealed.

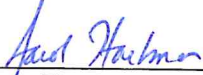
SECTION XII. SEVERABILITY CLAUSE

- A. If any section, provision, or other part of this Ordinance shall be adjudged invalid or unconstitutional, said adjudication shall not affect the validity of the Ordinance as a whole or any section, provision, or other part thereof not adjudged invalid or unconstitutional.

SECTION XIII. EFFECTIVE

- A. This Ordinance shall be effective after its final passage, approval and publication as provided by law.

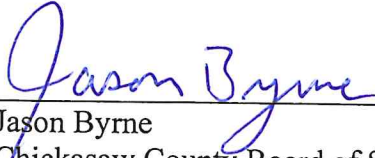
ADOPTED THIS 12TH DAY OF OCTOBER, 2020.



Jacob Hackman, Chair
Chickasaw County Board of Supervisors



Tim Zoll, Vice Chair
Chickasaw County Board of Supervisors



Jason Byrne
Chickasaw County Board of Supervisors

ABSENT

Steve Geerts
Chickasaw County Board of Supervisors



David Tilkes
Chickasaw County Board of Supervisors

ATTEST:



Joan E. Knoll
Chickasaw County Auditor

