
ARTICLE XXXIII HENDERSON COUNTY COMMERCIAL WIND ENERGY FACILITY REGULATIONS.

Section 33.01. Statement of Purpose.

The purpose of these regulations is to provide for the safest and most efficient integration of commercial wind energy generation facilities on land in Henderson County. The rules and regulations set forth herein are established in order to provide for such facilities in coordination with the recommendations of the comprehensive plan and to allow for such facilities with the intention of furthering the public health, safety, and general welfare of the County.

Section 33.02. Definitions.

Commencement of Construction. Initiation of physical on-site placement, assembly, or installation of Wind Towers, Supporting Facilities, materials, or equipment which will make up part of the CWEF on a Participating Property. Activities such as surveys, tree clearing and excavation work, or those conducted in preparation of environmental studies, geotechnical studies, cultural studies, do not constitute Commencement of Construction.

Commercial Wind Energy Facility (CWEF). A wind energy conversion facility of equal or greater than ten (10) MW in total Nameplate Capacity.

Facility Owner. A commercial enterprise that owns or operates a CWEF.

Nameplate Capacity. The designed full-load sustained generating output of an CWEF. Nameplate Capacity shall be determined by reference to the sustained output of the entire CWEF even if components of the CWEF are located on different parcels, whether contiguous or noncontiguous.

Nonparticipating Property. Real property that is not a Participating Property.

Nonparticipating Residence. A residence that is located on Nonparticipating Property and that is existing and occupied on the date that the site plan to develop the CWEF is filed with the Henderson County Planning Commission.

Occupied Community Building. Any one or more of the following buildings that exist and are occupied on the date that the site plan to develop the CWEF is filed with the Commission: a school, place of worship, day care facility, public library, or community center.

Participating Property. A CWEF host property or any real property that is the subject of an agreement that provides for the payment of monetary compensation to the landowner from the Facility Owner (or affiliate) regardless of whether any part of a CWEF is constructed on the property.

Participating Residence. A residence that is located on Participating Property and that is existing and occupied on the date that the site plan to develop the CWEF is filed with the Commission.

Shadow Flicker. A periodic shadow that may result in a flickering phenomenon that occurs when rotating blades of a Wind Tower pass between the sun and a specific location.

Supporting Facilities. The collection lines, substations, access roads, meteorological towers, storage containers, nonregulated electric transmission lines (as defined by KRS 278.700(5)), aircraft detection lighting systems and equipment associated with the generation of electricity by the CWEF.

Wind Tower. The foundation, wind turbine tower, nacelle, and blades.

Section 33.03. Where Permitted.

- A. CWEF is a permitted use in the following zones: M1, Light Industrial; M-2, Heavy Industrial; AG, Agricultural; or SM, Surface Mining as defined within the Zoning Ordinance.

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- B. An approved site plan for a CWF on property zoned as SM shall be deemed as in compliance with Section 27.06(D) of the Zoning Ordinance.

Section 33.04. General Requirements.

- A. A CWF constructed or installed prior to the effective date of this chapter shall not be required to meet the requirements of this chapter.
 - B. The following modifications to, retrofits or replacements of a CWF permitted and constructed under this chapter, and operating at the time of the modification, retrofit or replacement, shall require approval from the Planning Commission:
 - a. Increase the overall maximum blade tip height of a Wind Tower;
 - b. Generate noise inconsistent with the noise study required pursuant to Section 33.04(D)(5);
 - c. Generate Shadow Flicker inconsistent with the requirements of Section 33.04(B); or
 - d. Relocate a Wind Tower.
 - C. A Facility Owner that proposes to construct a CWF in Henderson County shall submit an application for a building permit and an electrical permit.
 - D. *Site Plan Application.* A site plan application must be submitted to the Planning Commission for approval by the Planning Commission. The submittal shall include the following:
 - 1. A completed Henderson City-County Planning Commission Site Plan Application.
 - 2. A completed Henderson City-County Planning Commission Site Plan Checklist, including all of the applicable requirements listed on the checklist and a preliminary site plan demonstrating compliance with the Design Standards as set forth in this chapter.
 - 3. The appropriate fee as set out in Section 7.07 of the Zoning Ordinance.
 - 4. *Emergency Response Plan.* A draft emergency response plan that includes on-site training for local first responders. Once finalized, copies of the emergency response plan will be provided to the local fire department, Henderson County Sheriff's Department, and the Henderson County Office of Emergency Management prior to Commencement of Construction.
 - 5. *Sound Model.* A noise study shall be performed to show expected sound levels at the location of every Occupied Community Building, Participating Residence, and Nonparticipating Residence within a half-mile of each Wind Tower. The study shall model the CWF using the methods in International Standard ISO 9613-2 with ground attenuation factors appropriate for the site and demonstrate sound shall not exceed 55 A-weighted decibels (dBA), inclusive of the impact from 35 dBA ambient background noise, at the nearest point on the foundation of any Nonparticipating Residence or Occupied Community Building (the "Sound Model"). The Sound Model shall account for the actual Wind Tower locations, Wind Tower specifications, Nonparticipating Residences, Occupied Community Building, wind speed and direction frequency, and site topography. The sound model and study shall be finalized and provided to the Planning Commission to demonstrate compliance with the noise limit provided in IV(G), prior to Commencement of Construction.
 - 6. *Shadow Flicker.* A Shadow Flicker study shall be prepared that demonstrates compliance with Section 33.05(B).
 - 7. The application shall include a copy of a decommissioning plan in accordance with this chapter.
 - E. *Processing of Application.* Applications for the construction of Commercial Wind Energy Facilities shall be processed as follows:
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1. At least thirty (30) days prior to submitting an application for a CWF, the applicant shall meet with Planning Commission staff to discuss their application and identify any potential deficiencies with same.
 2. Within sixty (60) days commencing from the date that the application is received by the Planning Commission, or within a date specified in a written agreement between the Planning Commission and the applicant, the Planning Commission shall approve, disapprove, or provide comments identifying any deficiencies. Upon receipt of comments, the applicant shall revise and resubmit the application to the Commission within thirty (30) days for review and approval. Upon resubmittal by the applicant, the Commission may (1) approve, (2) disapprove, or (3) provide comments identifying additional deficiencies with the application.
 3. At least one (1) public hearing on the application shall be held, at which hearing Applicant shall be given at least twenty (20) minutes to present their project and interested parties and citizens shall have the opportunity to be heard. Notice of the time and place of such hearing shall be published at least once, in the highest circulation newspaper in the city-county, provided that one (1) publication occurs not less than seven (7) calendar days nor more than twenty-one (21) calendar days before the occurrence of such hearing. A public notice sign will also be placed on the property by the Planning Commission. The Commission may approve or deny the application at the conclusion of the hearing, but shall issue a decision on the application no more than fourteen (14) days from the date of the public hearing.
 4. If the Planning Commission fails to take action within sixty (60) days of receiving an application, and if there is no written agreement between the Planning Commission and the Applicant for a specific date upon which to take action, the Planning Commission shall be deemed to have approved the application, even if no public hearing has been held pursuant to Section 33.04(E)(3).
- F. *Approval.* Approval by the Planning Commission of a CWF site plan for a shall constitute approval of the Supporting Facilities.
- G. *Final Site Plan.* At least thirty (30) days prior to Commencement of Construction, a final site plan shall be submitted to the Commission. Material deviations from the site plan submitted with the application shall be clearly indicated on the revised graphic included with the final site plan. A material deviation is a change to the site plan that does not comply with Section 33.05. The Executive Director may approve material deviations, or require the applicant to either submit an application for a variance or submit a new site plan application. Minor deviations from the site plan that maintain compliance with this Article shall be allowed with approval by the Executive Director of the Commission. Minor deviations from the site plan submitted with the application that do not conflict with Section 33.05 shall be approved.

Section 33.05. Design Standards.

- A. *Setbacks.* A CWF shall comply with the following minimum setbacks, to be measured from the center of the base of the Wind Tower:
1. Participating Residences shall be 1.1 times the maximum blade tip height of the Wind Tower to the nearest point on the outside wall of the structure but shall be no less than 1,000 feet.
 2. Nonparticipating Residences shall be 2.1 times the maximum blade tip height of the Wind Tower to the nearest point on the outside wall of the structure but shall be no less than 1,500 feet.
 3. Occupied Community Buildings shall be 2.1 times the maximum blade tip height of the Wind Tower to the nearest point on the outside wall of the structure but shall be no less than 1,500 feet.
 4. Public road rights-of-way shall be 1.1 times the maximum blade tip height of the Wind Tower to the center point on the public road right-of-way.
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5. Boundary lines of Nonparticipating Property shall be 1.1 times the maximum blade tip height of the Wind Tower to the nearest point on the property line of the Nonparticipating Property.
 6. Public utilities, including overhead electric lines and underground pipelines, shall be a minimum of 1.1 times the maximum blade tip height of the Wind Tower.
 7. There shall be no setback required from boundary lines of Participating Property.
- B. *Shadow Flicker.* A CWF shall be sited so that industry standard computer modeling indicates that any Occupied Community Building or Nonparticipating Residence will not experience more than thirty (30) hours per year of Shadow Flicker under planned operating conditions.
 - C. *Lighting.* Subject to Federal Aviation Administration (FAA) lighting requirements, lighting of the CWF shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded and downcast from abutting properties.
 - D. *Tree-cutting.* Removal of trees should be minimized to the extent possible.
 - E. *Noise limits.* During operation of the CWF, Nonparticipating Residences and Occupied Community Buildings shall not experience noise levels in excess of 45 A-weighted decibels (dBA) as measured at the nearest point on the foundation of any Nonparticipating Residence or Occupied Community Building to a Wind Tower.
 - F. *Fencing.* Appropriate security fencing must be installed, in accordance with National Electrical Safety Code standards.

Section 33.06. Compliance with State and Federal Regulations.

- A. *Electrical Safety Codes.* This chapter does not exempt or excuse compliance with electric facility clearances approved or required by the National Electric Code, the National Electrical Safety Code, the Federal Energy Regulatory Commission, and their designees or successors.
- B. *Environmental.* The applicant shall apply for any necessary and applicable federal, state, or local permits prior to Commencement of Construction and Operation, as applicable.
- C. *Road Use.* The applicant shall consult with Kentucky Transportation Cabinet and the Henderson County Road Department regarding truck and other construction traffic and obtain all necessary permits. Prior to Commencement of Construction, the applicant shall employ a third-party consultant to conduct an assessment of the roads anticipated to be utilized during construction. During construction, the applicant shall be financially responsible for repairs required on the roads utilized for construction to ensure safe roadways. The applicant shall also be responsible for repairing all roads to the conditions identified in the pre-construction assessment, or better.

Section 33.07. Decommissioning Plan and site reclamation.

- A. A decommissioning plan shall be prepared and meet the requirements of KRS 278.706(2)(m). In any instance where this Article conflicts with KRS 278.706(2), this Article shall be followed.
- B. The decommissioning plan shall include the removal/disposition of the following equipment used for operation of the CWF and located on Participating Property:
 1. Wind Towers (including foundations to a depth of at least 4 feet);
 2. Supporting Facilities;
 3. Transformers;
 4. Collection/interconnection equipment (including substation, cable, and steel foundations), provided however, that electrical collection cables at a depth of 4 feet or greater may be left in place;

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5. Overhead collection system;
 6. Access roads (unless the landowner requests in writing that the access road is to remain);
 7. Operation and maintenance yard/staging area unless otherwise agreed to by the Participating Property owner; and
 8. Debris and litter generated by decommissioning crews.
- C. The Facility Owner may negotiate with Participating Property owners to carry out the mitigative actions that Participating Property owners wish to perform themselves. In such instances, the Facility Owner will offer Participating Property owners the area commercial rate for their machinery and labor costs.
 - D. Unless the Participating Property owners opts to do the restoration work, all areas that were traversed by vehicles and decommissioning equipment will be ripped at least eighteen (18) inches deep, and all pasture and woodland will be ripped at least twelve (12) inches deep to the extent practicable. The existence of tile lines or underground utilities may necessitate less depth. The disturbed area will then be disked.
 - E. Following the completion of decommissioning of a CWEF, the Facility Owner will endeavor to restore the disturbed area to its original pre-construction elevation and contour should uneven settling occur or surface drainage problems develop as a result of said activity.
 - F. Access roads may be left intact through mutual agreement of the Participating Property owners and the Facility Owner unless otherwise restricted by federal or state regulations.
 - G. The Facility Owner will notify the Henderson City-County Planning Commission at least thirty (30) days before commencing decommissioning.
 - H. *Decommissioning Security.* Pursuant to KRS 278.710, the bond or other similar surety shall be in place prior to Commencement of Construction.
 1. Henderson County shall be listed as a secondary beneficiary to the bond or similar surety.
 2. The required financial assurance shall be updated every three (3) years.

Section 33.08. Variances.

Any person wishing to construct a CWEF not in accordance with the regulations prescribed in this Article may apply to the Board of Zoning Adjustment for a variance from such regulations. Such variance shall be granted where the Board's findings are consistent with KRS 100.243.