

217 WIND FARM STANDARDS - COMMERCIAL

217 PURPOSE & APPLICABILITY:

This Section governs the siting of any WECS and substation that generate electricity to be sold to wholesale or retail markets, and has been adopted to assure that any development and production of wind-generated electricity in Jay County is safe and effective. The Section also provides a regulatory scheme for the construction and operation of wind energy facilities in the County. Subject to reasonable restriction, these regulations are intended to preserve the health and safety of the public.

217.1 PROHIBITION:

No entity shall construct or operate a WECS within Jay County without having fully complied with the provisions of this Section and/or Ordinance.

217.2 DEFINITIONS:

The following words and terms shall, for the purpose of this Section and used elsewhere in this Ordinance, have the meaning shown herein.

Wind Energy Conversion Systems (WECS) - Commercial: All necessary devices that together convert wind energy into electricity and deliver that electricity to a utility's transmission lines, including but not limited to the rotor, nacelle, generator, WECS Tower, electrical components, WECS foundation, transformer, and electrical cabling from the WECS Tower, the substations, switching stations, meteorological towers, communications facilities and other required facilities and equipment, as related to the WECS project.

WECS Project: The collection of WECS (as defined) as specified in the siting approval application pursuant to this ordinance.

WECS Tower: The support structure to which the nacelle and rotor are attached, freestanding or guyed structure that supports a wind turbine generator.

WECS Tower Height: The distance from the rotor blade at its highest point to the top surface of the WECS foundation.

Wind Turbine Generator (WTG): Includes only the WTG nacelle, tower and blades

Substation (WECS): An apparatus that connects the electrical collection system of the WECS and increases the voltage for connection with the utility's transmission lines.

Switching Station (WECS): An apparatus / structure in the system similar to a substation but not necessarily increasing voltage into the grid.

Primary Structure: Means, for each property, the structure that one or more persons occupy the majority of time on that property for either business or personal reasons. Primary Structure includes structures such as residences, commercial buildings, hospitals, and day care facilities. Primary Structure excludes structures such as hunting sheds, storage sheds, pool houses, unattached garages and barns.

Applicant: The entity or person who submits to the County, an application for the siting of any WECS or Substation or thereafter operates or owns a WECS.

Operator: Means the entity responsible for the day-to-day operation and maintenance of the WECS, including any third party subcontractors.

Owner: Means the entity or entities with an equity interest in the WECS, including their respective successors and assigns. Owner does not mean (i) the property owner from whom land is leased for locating the WECS (unless the property owner has an equity interest in the WECS; or (ii) any person holding a security interest in the WECS solely to secure an extension of credit, or a person foreclosing on such security interest provided that after foreclosure, such person seeks to sell the WECS within one year of such event.

Financial Assurance: Means reasonable assurance from a credit-worthy party, examples of which include a surety bond, trust instrument, cash escrow, or irrevocable letter of credit or combinations thereof.

Professional Engineer: Means a qualified individual who is licensed as a professional engineer in any state in the United States.

217.3 WECS DEVELOPMENT PLAN APPROVAL & PERMIT PROCESS:

Prior to the construction of any WECS, the applicant, owner and operator shall be required to obtain the following:

- A. Development Plan approval for the project from the Jay County Plan Commission
- B. Approval from the Jay County Board of Zoning Appeals for any required variances or special exceptions anticipated for the project.
- C. Improvement Location Permits for each turbine and/or additional structure associated with the project from the Zoning Administrator.

217.4 DEVELOPMENT PLAN APPLICATION & REVIEW:

Prior to the construction of any WECS, the applicant, owner and operator shall file with the Zoning Administrator an application for Development Plan review. Development Plan review is provided for by the IC 36-7-4-1400 series. The Development Plan review process is not intended to provide an alternative to rezoning, variance, special exception, platting, or other established procedures; but rather to allow for the administrative review of site conditions and plans for consistency with applicable requirements prior to the issuance of Improvement Location Permits. The filing shall include but not be limited to the following:

- A. **Application:** The applicant, owner and operator shall submit an application for Development Plan review along with a description, including names, address, and contact information of the applicant, owner, and operator including their respective business structures; along with, but not be limited to the following.
 1. **Summary Statement & Site Description:** A WECS Project Summary shall include, but not be limited to:
 - a. a general description of the project including its approximate name plate generating capacity;
 - b. the general location of the project;
 - c. the type of WECS to be used and the potential equipment manufacturer;
 - d. the number of WECS towers;
 - e. the maximum height of the WECS tower and max diameter of the WECS rotor;
 - f. the nameplate generating capacity of each WECS;
 2. **The names, addresses, and contact information for all property owners with WECS towers proposed on their properties.**

3. **Site Plan:** A site plan at a scale approved by the Zoning Administrator showing:
 - a. the proposed location of the wind energy facility including planned locations of each WECS tower and substations;
 - b. primary structures within one quarter of one mile of any WECS;
 - c. property lines, including identification of adjoining properties;
 - d. public roads;
 - e. any recognized historic or heritage sites as noted by the Division of Historic Preservation and Archeology of the Indiana Department of Natural Resources;
 - f. and any wetlands based upon a delineation prepared in accordance with the applicable U.S. Army Corps of Engineer requirements and guidelines.
 4. **A topographic map** of the project site and the surrounding area which shall encompass an area at least a quarter mile radius from the proposed project site with contours of not more than five foot intervals
 5. **Proof of Road Use Agreement approval** (see Section 217.12)
 6. **Proof of Decommissioning Plan Agreement approval** (see Section 217.13)
 7. **Proof of Liability Insurance Plan approval** (See Section 217.14)
 8. **Any other information** required by the Zoning Administrator for the proper enforcement of this Ordinance.
 9. **The fee applicable to the application** shall be payable at the time of submission of the application, and such fee shall be \$20,000.00. The Application fee shall be used to defray the costs associated with the Application, including professional fees and expenses.
- B. Zoning Administrator Review:** The Zoning Administrator shall review the Development Plan, including all supporting information. When the proposed Development Plan is in compliance with the requirements of the Ordinance, the Development Plan shall be forwarded to the Plan Commission for review in a public hearing.
- C. Public Hearing Notification:** Notification for the scheduled public hearing regarding the Development Plan shall be completed consistent with the requirements of the Rules & Procedures of the Plan Commission along with the requirements of IC 5-3-1 for publication.
- D. Plan Commission Review:** The Plan Commission shall, in a public hearing, review the development plan. The review of the development plan shall be in compliance with the requirements of IC 36-7-4-1405 as amended.
- E. Findings of Fact (IC 36-7-4-1406):** The Zoning Administrator shall prepare and sign written findings of fact documenting the action taken by Plan Commission.
- G. Permits:** Prior to any construction activity, the applicant, owner and operator shall be required to obtain the appropriate Improvement Location Permit(s) and any other required permits specified by this Ordinance.

217.5 REVISIONS TO DEVELOPMENT PLAN:

Any revisions to the approved Development Plan including, but not limited to, a change in the number of turbines, a change in the location of the turbines, a change in the turbine size and/or height, shall require approval prior to the issuance of any construction permits. The proposed revisions along with all required supporting information shall be submitted to the Zoning Administrator for review, to assure that the revisions are in compliance with the Ordinance. If the Zoning Administrator determines that the revisions require Plan Commission approval, the revisions will be forwarded to the Plan Commission for review. If the Plan Commission determines that a public hearing is necessary, notification for the public hearing will be consistent with the requirements of the Rules & Procedures of the Plan Commission. The review shall be in compliance with the requirements of IC 36-7-4-1405 as amended.

217.6 VARIANCES AND SPECIAL EXCEPTIONS:

Any application for variance or special exception approval may be a combined application provided all property owners subject to the variance or special exception where the WECS facilities are to be located are co-applicants. The applicant may also submit a joint application for any variances that are needed for the project area. The variance or special exception requests will be considered by the Jay County Board of Zoning appeals in a public hearing. Notification for the public hearing will be consistent with the requirements of the Rules & Procedures of the Board of Zoning Appeals along with the requirements of IC-5-3-1 for publication.

217.7 REQUIREMENTS FOR IMPROVEMENT LOCATION PERMIT:

Prior to any construction associated with the WECS project, the applicant, owner and/or operator shall file with the Zoning Administrator a separate application for each wind turbine site along with any other structures associated with the project and pay the according permit fees.

A. Application: Each application shall include, but not be limited to the following:

1. A plot plan for each wind turbine parcel showing the following:
 - a. the location of the turbine and/or structure including all access roads, property lines and showing all setbacks;
 - b. the location of all above-ground utility lines within a radius equal to two (2) times the height of the proposed WECS;
 - c. the location of all underground utility lines associated with the WECS site;
 - d. the location of all guy lines, anchor bases (if any), electrical cabling and ancillary equipment.
2. Copies of any necessary recorded setbacks, access easements and/or necessary recorded utility easements if any.
3. Dimensional representation of the structural components of the tower construction including the base and footings.
4. Schematic of electrical systems associated with the WECS including all existing and proposed electrical connections.
5. Manufacturer's specifications and installation and operation instructions or specific WECS design information.
6. Certification by a registered professional engineer that the tower design is sufficient to withstand wind load requirement for structure as defined by International Code Council.
7. Certification by a professional engineer that the foundation and tower design of the WTG is within accepted professional standards, given local soil and climate conditions.
8. No appurtenances other than those associated with the wind turbine operations shall be connected to any wind tower except with express, written prior approval by the JBZA.

B. Additional Information Requirements: The following may be submitted one time for the entire project, but must be submitted prior to the issuance of any permits.

1. **Proof of a Fire Protection Plan** coordinated with the County Fire Departments. The applicant, owner and/or operator shall cooperate with the local fire departments to develop the fire department's emergency response plan prior to the issuance of any permits. Nothing in this Ordinance shall alleviate the need to comply with all other applicable fire laws and regulations.
2. **Proof of a drainage plan approval.** A drainage plan for construction and operation must be approved by the Jay County Drainage Board prior to issuance of any permits.
3. **An erosion control plan (Rule 5)** must be approved by the Jay County Soil & Water Conservation District regarding IDEM Rule 5 requirements prior to issuance of any permits.
4. **Health Department Approval:** The applicant, owner and/or operator shall comply with existing septic and well regulations as required by the Jay County Health Department and the Indiana Department of Public Health prior to the issuance of any applicable permits.
5. **Proof of Correspondence and Cooperation with Wildlife Agencies:** For the purposes of preventing harm to any bats and/or migratory birds and in compliance with the Migratory Bird Treaty Act, the applicant shall provide written documentation of their direct correspondence and cooperation with the US Fish and Wildlife Services and the Indiana Department of Natural Resources.
7. **Any other information** required by the Zoning Administrator for the proper enforcement of this Ordinance.

C. Permit Fees: Payment of all fees is required with the submission of each application.

1. Each WECS tower shall require a separate Improvement Location Permit. The fee for each permit shall be \$1,750.00 per MW, which shall be used to cover the expenses associated with the issuance of Improvement Location Permits and to defray the costs of any other professional services as needed.
2. Any other structure associated with the project shall require a separate Improvement Location Permit. The permit fee will be in accordance with the Official Fee Schedule, which is maintained by the Zoning Administrator.

217.8 SETBACK REQUIREMENTS:

A. The minimum setback distances for WECS shall be as follows:

| <u>Distance from a...</u> | <u>Minimum Setback Distance</u> |
|---|--|
| Property line , measured from the center of the WECS to the property line | 1.5 times the total height (where the blade tip is at the highest point) for non-participating landowners. The setback requirement may be waived in writing by participating landowners |
| ----- Residential dwellings , measured from the center of the WECS to the nearest corner of the structure | 1,500 feet for non-participating landowners. The setback requirement may be waived, in writing, by participating landowners |
| ----- Church, school, business or public building , measured from the center of the WECS to the nearest corner of the structure | 1,500 feet |
| ----- Area zoned Commercial, Rural Residential and any Commercial zoned recreational area , measured from the center of the WECS to the property line | 1,500 feet |
| ----- Road right-of-way , measured from the center of the WECS to the edge of the right-of-way | 1.1 times the total height (where the blade tip is at its highest point), provided that the distance is no less than 350 feet |
| ----- Access driveways to the WECS measured from the center of the WECS to the property line | All access driveways to the WECS must be 300 feet for any non-participating landowner property lines. |
| ----- Other right-of-way , such as railroads and utility easements, measured from the center of the WECS to the edge of the right-of way | 1.1 times the total height (where the blade tip is at its highest point), provided that the distance is no less than 350 feet |
| ----- Incorporated limits of a municipality measured from the center of the WECS to the corporate limits | 1,500 feet from the incorporated limits of any municipality in Jay County |
| ----- Nature preserve, park and/or recreational use including property owned by IDNR, Friends of the Limberlost and/or any such property associated with the Loblolly reconstruction project area, and Public conservation lands, measured from the center of the WECS to the nearest point of the land in question | 2,640 feet (1/2 mile) from property lines |
| ----- Wetlands , as defined by the U.S. Army Corps of Engineers, measured from the center of the WECS to the nearest point of the wetland in question | As determined by a permit obtained from the Army Corps of Engineers |

B. Any new primary structure built adjacent to a WECS shall maintain the same minimum setback requirements.

C. No part of a WECS shall be constructed in any setback, dedicated public easement or dedicated public right-of-way without prior written authorization from the County.

217.9 WECS SAFETY DESIGN & INSTALLATION STANDARDS:

- A. **Design Safety Certification:** Any WTG shall conform to applicable industry standards. The applicant, owner and/or operator shall submit certificates of design compliance that wind turbine manufacturers have obtained from Underwriters Laboratories, Det Norske Veritas, Germanischer Lloyd Wind Energie, and/or an equivalent third party. Following the granting of siting approval under this Ordinance, a professional engineer shall certify, as part of the improvement location permit application that the foundation and tower design of the WTG is within accepted professional standards, given local soil and climate conditions.
- B. **Equipment Type:** All turbines shall be new equipment commercially available. Used, experimental or proto-type equipment still in testing shall require approval by the BZA as per the normal special exception process.
- C. **Electrical Components, Cabling & Wiring:** All electrical components of the WECS shall conform to applicable local, state, and national codes, and relevant national and international standards. All WECS electrical collection cables between each WECS shall be located underground unless they are located on public or utility rights-of-way or with prior County approval. All underground work shall comply with the regulations as follows
- a. All underground cabling buried no less than 60" (sixty inches) deep.
 - b. All underground cabling will have warning mesh at 36" (thirty six inches) deep.
 - c. All underground cabling will be marked at road crossings, creeks, river beds and property lines.
- D. **Utility Interconnection:** Any WECS, if interconnected to a utility system, shall meet the requirements for interconnection and operate as set forth in the electrical utility's then-current service regulations applicable to WECS.
- E. **Warnings:** A visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations. Visible, reflective, colored objects such as flags, reflectors, or tape shall be placed on the anchor points of guy wires and along the guy wires up to a height of not more than 15 feet from the ground.
- F. **Lighting:** All lighting shall be shielded so that no glare extends substantially beyond the boundaries of the wind farm facilities. All lighting shall be in compliance with all applicable FAA regulations.
- G. **Color:** Towers and blades shall be painted with non-reflective white or gray color, and shall be in compliance with all applicable FAA regulations.
- H. **Blade Clearance:** The minimum distance between the ground and any protruding blade utilized on a WTG shall be 15 feet, as measured at the lowest point of the arc of the blades. The minimum distance shall be increased as necessary to provide for vehicle clearance in locations where oversized vehicles might travel.
- I. **Controls and Brakes:** All WECS shall be equipped with a redundant braking system. This includes both aerodynamic over speed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Stall regulation shall not be considered a sufficient braking system for over speed protection.
- J. **Noise and Vibration Standards:** All WECS shall be located so that the level of noise produced by the mechanics of the turbine and/or wind turbine operation heard off-site shall not exceed 55 dBA. This standard shall supersede any noise standard as set forth in any other Article in the Zoning Ordinance.
- L. **Climb Prevention:** All WECS tower designs must include features to deter climbing or be protected by anti-climbing devices such as: (1) fences with locking portals at least 6 feet high; (2) anti-climbing devices 15 feet vertically from the base of the WECS tower, and/or; (3) locked WECS tower doors.

- M. **Damage & Repairs:** All damages including, but not limited to waterways, drainage ditches, field tiles, and/or any other infrastructures caused by the construction or maintenance of the WECS, must be completely repaired to original or better condition, and so as not to impede the flow of water. All repairs must be completed within a reasonable amount of time as agreed upon between the County and the applicant, owner and/or operator.
- N. **Waste Handling & Disposal:** All solid waste whether generated from supplies, equipment, parts, packaging, operation and/or maintenance of the facility, including but not limited to old parts and equipment, shall be removed from the site promptly and disposed of in accordance with all local, state and federal, laws. All hazardous materials and/or waste related to the construction, operation and/or maintenance of the facility, including but not limited to lubrication materials, shall be handled, stored, transported and disposed of in accordance with all local, state and federal laws.

217.10 Underground Work After Construction:

To help insure the safety of the public, no underground work, including but not limited to farm drainage, gas lines, and/or any other such work, shall be performed on land within the WECS project area without an employee of the WECS operation on site. This includes but is not limited to, property owners, sub-contractors, utility workers and/or County employees.

217.11 OPERATION, MAINTENANCE AND INSPECTIONS:

- A. **Maintenance:** Any physical modification to the WECS that alters the mechanical load, mechanical load path, or major electrical components shall require re-certification. Like-kind replacements shall not require re-certification. Prior to making any physical modifications (other than a like-kind replacement), the owner and/or operator shall confer with the County Building Inspector to determine whether the physical modification requires re-certification.
- B. **Interference:** If, after construction of the WECS, the owner and/or operator receives a written complaint related to interference with local broadcast residential television, telecommunication, communication, microwave transmissions and including shadow flicker, the WECS owner and/or operator shall take reasonable steps to respond to minimize the complaint.
- C. **Inspections:** The Jay County Building Inspector, and/or licensed third party professionals retained by the County for the specific purpose of conducting inspections of the WECS shall have the right, at any reasonable time and with sufficient prior notice, to accompany the owner and/or operator and/or his agent, on the premises where a WECS has been constructed, to inspect all parts of said WECS installation and to require that repairs or alterations be made. The owner and/or operator of a WECS may retain a licensed third party professional engineer familiar with WECS systems to prepare and submit to the County Building Inspector which addresses the repairs or alterations requested and which suggest alternate methods for addressing the concerns or provides evidence that said repairs or alterations are unnecessary, within thirty (30) days after receiving notice from the County Building Inspector that repairs or alterations are requested, or within a longer period of time mutually acceptable to both parties. The County Building Inspector will consider any such written report and determine whether the repairs or alterations should be made as originally requested or as suggested in the written report. In the event of a dispute between the County Building Inspector and the owner and/or operator, or a third party professional engineer retained by them, as to the repairs or alterations which are required, the decision of the County Building Inspector shall be final. Any fees for inspections made by a third party professional inspector and/or engineer retained by the County shall be paid by the owner and/or operator.
- D. **Declaration of a Public Nuisance:** Any WECS thereof declared to be unsafe by the Jay County Building Inspector by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage or abandonment is hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition or removal in accordance with the approved Decommissioning Plan Agreement. Nothing in this Ordinance is intended to preempt any other applicable state and federal laws and regulations.

217.12 ROAD USE AGREEMENT:

Prior to the use of any county road for the purpose of transporting WECS or substation parts and/or equipment for construction, operation, or maintenance of the WECS or substation, the applicant, owner and/or operator must provide proof of a signed road agreement between the County and the applicant, owner and/or operator. The Road Use Agreement must include, but not be limited to the following:

- A. Identification of all such public roads: Any proposed routes that will be used for construction and maintenance purposes shall be identified. If the route includes a public road, it must be approved by the County Engineer. The County Engineer shall conduct a pre-construction baseline survey to determine existing road conditions for assessing potential future damage.
- B. Any road damage caused by the construction of the WECS project equipment, the installation of same, or the removal of same, must be repaired to the satisfaction of the County Engineer. The County Engineer may choose to require either remediation of road damage upon completion of the project or is authorized to collect fees for oversized load permits. Further, a corporate surety bond in an amount to be fixed by a professional engineer may be required by the County Engineer to insure the County that future repairs are completed to the satisfaction of the County. The cost of bonding is to be paid by the applicant, owner and/or operator.
- C. Newly constructed WECS access roads may not impede the flow of water and shall comply with the Jay County Drainage Ordinance and Drainage Plan Agreement.
- D. No part of the WECS including, but not limited to above ground transmission lines and poles or below ground transmission lines shall be constructed and/or placed in any County road right-of-way or dedicated easement without prior written approval from the County.

217.13 DECOMMISSIONING PLAN AGREEMENT:

Prior to receiving construction approval for the WECS project, the applicant, owner and/or operator must provide proof of a signed Decommissioning Plan Agreement between the County and the applicant, owner and/or operator. The Decommissioning Plan is to ensure that the WECS facilities are properly decommissioned upon the end of the project life or facility abandonment. The Decommissioning Plan shall include but not be limited to the following:

- A. Assurance that the facilities are properly decommissioned upon the end of the project life or facility abandonment. The applicant, owner and/or operator's obligations with respect to decommissioning shall include removal of all physical material pertaining to the project improvements to a depth of 48" beneath the soil surface, and restoration of the area occupied by the project improvements to the same or better condition that existed immediately before construction of such improvements. Prior to issuance of a building permit, the applicant, owner and/or operator shall provide a contractor cost estimate for demolition and removal of the WECS facility and will provide financial assurance in an amount at least equal to said demolition and removal contractor cost estimate, through the use of a bond, letter of credit or other security acceptable to the County, the cost of decommissioning each tower to be constructed under the building permit, which security shall be released when such tower is properly decommissioned as determined by the County Building Inspector. In the event of abandonment by the owner and/or operator, the applicant will provide an affidavit to the Zoning Administrator representing that all easements for wind turbines shall contain terms that provide financial assurance, including access to the salvage value of the equipment, for the property owners to ensure that facilities are properly decommissioned within twelve (12) months of expiration or earlier termination of the project.
- B. The applicant, owner, and/or operator's failure to comply with, or make reasonable progress in getting into compliance any of the above provisions shall constitute a default under this Ordinance.
- C. Prior to implementation of the existing County procedures for the resolution of each default, the appropriate County body shall first provide written notice to the owner and operator, setting forth the alleged default. Such written notice shall provide the owner and operator a reasonable time period, not to exceed 60 days, for good faith negotiations to resolve the alleged default.
- D. If the County determines, in its discretion, that the parties cannot resolve the alleged default within the good faith negotiation period, the existing County ordinance provisions addressing the resolution of such default shall govern.

217.14 LIABILITY INSURANCE:

The owner or operator of the WECS shall maintain general comprehensive liability insurance coverage naming Jay County as an additional party insured with a company and under terms approved by Jay County with combined limits for bodily injury and property damage in the aggregate amount of \$5 million per occurrence with a commercially reasonable deductible approved by Jay County.

217.15 INDEMNIFICATION:

The applicant, owner and/or operator of the WECS project shall defend, indemnify, and hold harmless the County and its officials from and against any and all claims, demands, losses, suites, causes of action, damages, injuries, costs, expenses, and liability whatsoever, including attorney's fees, without limitation, arising out of acts or omissions of the applicant, owner and/or operator associated with the construction and/or operations of the WECS project

217.16 CHANGE IN OWNERSHIP:

It is the responsibility of the owner and/or operator listed in the application to inform the Zoning Administrator of all changes in ownership and operation during the life of the project, including the sale or transfer of ownership and/or operation.

217.17 WAIVING REQUIREMENTS:

Requirements of this Section may be waived by the Jay County Board of Zoning Appeals upon application and after public hearings.