# Unified Development Document Wind Energy Convergence Ordinance

# For Monterey, Medaryville & Pulaski County, Indiana

September 2011

Pulaski County Plan Commission

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# SECTION I: GENERAL INFORMATION

# 1.1 Purpose & Intent

- A. The purposes of this Ordinance are to:
  - 1. Assure that any development and production of wind-generated electricity in Pulaski County is safe and effective;
  - 2. Facilitate economic opportunities for local residents; and
  - 3. Promote the supply of wind energy in support of Indiana's alternative energy sources potential and other such economic development tools.
- B. The intent of this Ordinance is to provide a regulatory scheme for the construction and operation of Wind Energy Convergence Systems (WECS) in the county; subject to reasonable restrictions, these regulations are intended to preserve the health and safety of the public.

# 1.2 Applicability

The provisions of this Chapter are applicable to those districts which allow WECS, govern the siting of WECS and substations that generate electricity to be sold to wholesale or retail markets, or that generate electricity for private use. A reasonable attempt shall be made to notify all property owners within the defined area of the WECS project prior to making application for a WECS permit. Notification may be done by media, separate mailings, or through the public notice requirements prescribed by IC 5-3-1 as amended from time to time. Said notice shall inform land owners of the intent to build a Commercial WECS and/or wind farm.

## 1.3 Prohibition

No applicant shall construct, operate, or locate a WECS within Pulaski County without having fully complied with the provisions of this Ordinance.

# 1.4 Conflict With Other Regulations

Nothing in this Chapter is intended to preempt other applicable state and federal laws or regulations, including compliance with all Federal Aviation Administration rules and regulations and shall comply with the notification requirements of the FAA. Nor are they intended to interfere with, abrogate, or annul any other ordinance, rule, or regulation, statute or other provision of law. In the event that any provision of these regulations imposes restrictions different from any other ordinance, rule, regulation, statute, or provision of law, the provisions that are more restrictive or that imposes higher standards shall govern.

## 1.5 Definitions:

A) Meteorological Tower: A tower that hosts weather instrumentation to evaluate meteorological conditions.

- B) WECS, Commercial: A WECS that is designed and built to provide electricity to the electric utility's power grid: In general, a commercial WECS will have 100 KW (kilowatt) and above total generating capacity.
- C Micro-WECS: a type of non-commercial WECS which typically has a total generating capacity of 10 kilowatts or less and utilizing supporting towers of sixty (60) feet or less.
- D) WECS: Non-Commercial: In general, a non-commercial WECS has less than 40 kilowatts in total generating capacity. A Non-Commercial WECS is generally designed and built for localized power consumption.
- E) WIND FARM: a wind farm is a collection of wind turbines in the same location and used for the generation of electricity.
- F) "Owner" means the entity or entities with an equity interest in the WECS (s), including their respective successors and assigns. Owner does not mean the property owner from whom land is leased for locating the WECS (unless the property owner has an equity interest in the WECS); or any person holding a security interest in the WECS(s) 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(s) within one year of such event.
- G: "Applicant" means 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.
- H: "Operator" means the entity responsible for the day-to-day operation and maintenance of the WECS, including any third party subcontractors..

#### 1.6 FEE SCHEDULE:

- 1: WECS:
- A) Meteorological Tower = One hundred seventy five dollars (\$175.00) per tower
- B) Commercial WECS = 1) \$20,000.00 per Special Exception Application Fee per phase:
- C) Micro WECS = \$175.00 per turbine:
- D) Non Commercial WECS = \$300.00 per turbine.
- 2) An Improvement Location Permit (Building Permit) Fee of one thousand seven hundred dollars (\$1,750.00) per megawatt per phase to be pro-rated to determine a permit fee for fractional megawatt capacity for a commercial WECS only.

# Section II: Regulations

## 2.1 Location

Commercial, non-commercial, and micro-WECS will be permitted, or not permitted, in various districts as prescribed by the Official Schedule of Uses (Appendix A).

# A. Height

Any NON-COMMERCIAL WECS or meteorological tower greater than two hundred (200) feet in height shall require a special exception use permit. For COMMERCIAL WECS there is no limitation on height, except those height limitations imposed by FAA rules and regulations. No Micro-WECS shall exceed sixty (60) feet in height.

## B. Horizontal extension

The furthest horizontal extension of a WECS (including guy wires) shall not extend into a required setback by the zoning district or be closer than twelve (12) feet to any primary structure, or right-of-way easement for any above-ground telephone, electrical transmission or distribution lines.

# 2.2 Setback Requirements

TABLE A: MINIMUM SETBACK DISTANCES FOR COMMERCIAL WECS

Distance from A	MINIMUM SETBACK DISTANCE
Property line, measured from the center of the WECS to the property line	1.1 times the total height (where the blade tip is at its 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	One thousand (1,000) feet for non-participating landowners.1 The setback requirement may be waived, in writing, by participating landowners.
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 three hundred and fifty (350) feet2
Other rights-of-way, such as railroads and utility easements, measured from the center of the WECS to the edge of the right-of-	1.1 times the total height (where the blade tip is at its highest point), provided that the distance is no less than three hundred and fifty (350) feet

way	
Jasper –Pulaski Fish and Wildlife Area measured from the nearest point of the WECS to the property line.	Four Miles
Public conservation lands, measured from the center of the WECS to the nearest point of the public conservation land in question	Seven hundred and fifty (750) feet
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
Tippecanoe River measured from the center of the WECS to the shoreline	One-half (1/2) mile
Incorporated limits of a municipality, measured from the center of the WECS to the corporate limits	Fifteen hundred (1,500) feet

The setback for residential dwellings shall be reciprocal in that no residential dwelling shall be constructed within one thousand (1,000) feet of a COMMERCIAL WECS.

The setback shall be measured from future rights-of-way width if a planned road improvement or expansion is known at the time of application.

TABLE B: MINIMUM SETBACK DISTANCES FOR NON-COMMERCIAL WECS AND MICRO WECS

Distance from A	MINIMUM SETBACK DISTANCE
Property line, measured from the center of the WECS to the property line	1.1 times the total height (where the blade tip is at its highest point), provided that the distance is no less than the required yard setback prescribed for that district
Residential dwellings, measured from the center of the WECS to the nearest corner of the structure	1.1 times the total height (where the blade tip is at its highest point)
Road right-of-way, measured from the center of the WECS to the edge	1.1 times the total height (where the blade tip is at its highest point), provided that the distance is no less the

of the right-of-way	required yard setback prescribed for that district3
Other rights-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 the required yard setback prescribed for that district
Public conservation lands, measured from the center of the WECS to the nearest point of the public conservation land in question	Seven hundred and fifty (750) feet
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
Tippecanoe River measured from the center of the WECS to the shoreline	One half (1/2) of a mile

The setback shall be measured from future rights-of-way width if a planned road improvement or expansion is known at the time of application.

Table C: Minimum Setback Distances For Meteorological Towers

DISTANCE FROM A	Minimum Setback Distance
Property line, measured from the center of the WECS to the property line	1.1 times the total height, provided that the distance is no less than the required yard setback
Residential dwellings, measured from the center of the WECS to the nearest corner of the structure	1.1 times the total height
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, provided that the distance is no less than the required yard setback4
Other rights-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, provided that the distance is no less than the required yard setback

The setback shall be measured from future rights-of-way width if a planned road improvement or expansion is known at the time of application.

# Section III: Safety Design & Installation Standards

# 3.1 Equipment Type

## A. Turbines

ALL turbines shall be constructed of commercially available equipment.

# B. Meteorological towers

Meteorological towers may be guyed.

# C. Experimental, or proto-type equipment

Experimental or proto-type equipment still in testing which does not fully comply with industry standards, may be approved by the Board of Zoning Appeals per the variance process established by this Ordinance.

# 3.2 Industry Standards And Other Regulations

ALL WECS shall conform to applicable industry standards, as well as all local, state and federal regulations. An applicant shall submit certificate(s) of design compliance that wind turbine manufacturers have obtained from Underwriters Laboratories, Det Norske Veritas, Germanishcher Lloyed Wind Energie, or an equivalent third party.

## 3.3 Controls And Brakes

# A. Braking system

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. Stall regulation shall not be considered a sufficient braking system for over speed protection.

## B. Operation mode

ALL Mechanical brakes shall be operated in a fail-safe mode.

# 3.4 Electrical Components

# A. Standards

All electrical components of ALL WECS shall conform to applicable local, state and national codes, and any relevant national and international standards.

#### B. Collection cables

All electrical collection cables between each WECS shall be located underground wherever possible.

## C. Transmission lines

ALL transmission lines that are buried should be at a depth consistent with or greater than local utility and telecommunication underground lines standards or as negotiated with the land owner or the land owner's designee until the same reach the property line or a substation adjacent to the property line.

# 3.5 Color And Finish

In addition to all applicable FAA requirements, the following shall also apply:

#### A. Wind turbines and towers

ALL wind turbines and towers that are part of WECS shall be white, grey, or another non-obtrusive color.

#### B. Blades

ALL blades shall be white, grey, or another non-obtrusive color. Blades may be black in order to facilitate deicing.

# C. Finishes

Finishes shall be matte or non-reflective.

# D. Exceptions

Exception may be made for meteorological towers, where concerns exist relative to aerial spray applicators.

# 3.6 Warnings

# A. Towers, transformers, and substations

For all COMMERCIAL WECS, a sign or signs shall be posted on the tower, transformer and substation warning of high voltage. Signs with emergency contact information shall also be posted on the turbine or at another suitable point.

# B. Guy wires and anchor points

For ALL guyed towers, one of the following warning mechanisms shall be used for each anchor point:

# 1. Visible or reflective objects

Visible and reflective objects, such as flags, plastic sleeves, reflectors, or tape placed on the anchor points of guy wires and along the innermost guy wires up to eight (8) feet above the ground.

# 2. Visible Fencing

Visible fencing not less than four (4) feet in height installed around anchor points of guy wires.

## C. Non-commercial WECS and Micro-WECS

The following notices shall be clearly visible on all Non-commercial WECS, and Micro-WECS towers and accessory facilities

- 1. "No Trespassing" signs shall be attached to any perimeter fence.
- 2. "Danger" signs shall be posted at the height of five (5) feet on WECS towers and accessory structures
- 3. A sign shall be posted on the tower showing an emergency telephone number
- 4. The manual electrical and/or overspeed shutdown disconnect switch(es) shall be clearly labeled.

# D. Meteorological towers

Consideration shall be given to paint aviation warning on all Meteorological Towers.

# 3.7 CLIMB PREVENTION

All COMMERCIAL WECS tower designs shall include features to deter climbing or be protected by anti-climbing devices such as:

- A. Fences with locking portals at least six (6) feet in height; or
- B. Anti-climbing devices fifteen (15) feet vertically from the base of the WECS tower; or
- C. Locked WECS Tower doors.

## 3.8 Blade Clearance

The minimum distance between the ground and any protruding blades(s) utilized on all Commercial WECS shall be twenty-five (25) feet, as measured at the lowest point of the arc of the blades. The minimum distance between the ground and any protruding blade(s) utilized on all remaining WECS shall be a minimum of fifteen (15) feet, as measured at the lowest point of the arc of the blades, provided the rotor blade does not exceed 20 feet in diameter. In either instance, the minimum distance shall be increased as necessary to provide for vehicle clearance in locations where over-sized vehicles might travel.

# 3.9 Lighting

# A. Intensity and frequency

ALL lighting, including lighting intensity and frequency of strobe, shall adhere to but not exceed requirements established by Federal Aviation Administration permits and regulations.

# B. Shielding

Except with respect to lighting required by the FAA, lighting may require shielding so that no glare extends substantially beyond any WECS structure.

# 3.10 Materials Handling, Storage And Disposal

#### A. Solid wastes

All solid wastes whether generated from supplies, equipment, parts, packaging, operation or maintenance of the facility, including old parts and equipment related to the construction, operation and/or maintenance of any WECS shall be removed from the site promptly and disposed of in accordance with all federal, state, and local laws.

#### B. Hazardous materials

All hazardous materials or waste related to the construction, operation and/or maintenance of any WECS shall be handled, stored, transported and disposed of in accordance with all applicable local, state and federal laws.

## SECTION IV: OTHER APPLICABLE STANDARDS

## 4.1 GUYED WIRE ANCHORS

No guyed wire anchors shall be allowed within any required road right-of-way setback.

## 4.2 Sewer & Water

ALL WECS facilities shall comply with the existing septic and well regulations as required by the Pulaski County Health Department and/or the State of Indiana Department of Public Health.

# 4.3 Noise & Vibration

The noise level of NON-COMMERCIAL WECS shall be no greater than sixty (60) decibels measured from the nearest residence. This level may only be exceeded during short-term events such as utility outages and/or severe wind storms. All other noise and vibration levels shall be in compliance with all county, state and federal regulations.

# 4.4 Utility Interconnection

The WECS, if interconnected to a utility system, shall meet the requirements for interconnection and operate as prescribed by the applicable regulations of the electrical utility, as amended from time to time.

# 4.5 Signage

The following signage regulations and standards apply. In the event that one of the following regulations or standards conflicts with another sign regulation or standard prescribed by this ordinance, the most restrictive regulation or standard shall apply.

#### A. Surface area

No sign shall exceed sixteen (16) square feet in surface area.

# B. Height

No sign shall exceed eight (8) feet in height.

# C. Manufacturer's or owner's company name and/or logo

The manufacturers or owner's company name and/or logo may be placed upon the compartment containing the electrical equipment.

# D. Development signs

An identification sign relating to the wind farm development may be located on each side of the total project area, provided that there are no more than four (4) signs located on any one project site.

# E. Other signs and logos

No other advertising signs or logos shall be placed or painted on any WECS.

## 4.6 FEEDER LINES

With the exception of minimum setback distances, feeder lines installed as part of any WECS shall not be considered an essential service. To wit, all communications and feeder lines installed as part of any WECS shall be buried underground wherever possible.

## 4.7 Other Appurtenances

No appurtenances other than those associated with the wind turbine operations shall be connected to any wind tower except with express, written permission by the Board of Zoning Appeals.

# Section V: Operation & Maintenance

# 5.1 Physical Modifications

In general, any physical modification to any 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. Therefore, prior to making any physical modification, the owner or operator shall confer with the Building Department and Area Plan Commission to determine whether the physical modification requires re-certification.

# 5.2 Interference

Prior to construction, a communications study to minimize interference with public or public serving utility microwave transmissions shall be completed. If necessary, the applicant, owner and/or operator shall mitigate interference with electromagnetic communications, such as radio, telephone, microwaves, or television signals caused by any WECS. In addition, the applicant, owner, and/or operator shall comply with the following:

## A. Pre-construction

The applicant shall complete a communications study prior to construction so as to minimize interference with any public or public serving utility microwave transmissions.

#### B. Post-construction

If, after construction of the WECS, the owner or operator receives a written complaint related to interference with the broadcast of residential television, telecommunication, communication or microwave transmissions, the owner or operator shall take reasonable steps to mitigate said interference. Interference with private telecommunications systems such as GPS shall be between the company and the complainant.

# C. Failure to remedy a complaint

If an agreement to remedy a known interference is not reached within ninety (90) days, appropriate action will be taken, which may result in requiring the WECS to become inactive. This does not apply to interference with private telecommunications systems.

# 5.3 Declaration Of Public Nuisance

Any WECS thereof declared to be unsafe by the Pulaski County Building Inspector by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, 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.

# Section VI: Decommissioning Plan

Prior to receiving an Improvement Location Permit or Building Permit, or siting approval under this Ordinance, the County and the applicant, owner and/or operator shall formulate a decommissioning plan outlining the anticipated means and cost of removing a WECS at the end

of their serviceable life or upon becoming a discontinued or abandoned use to ensure that the WECS is properly decommissioned.

# 6.1 Content

A decommissioning plan shall include, at a minimum, language to the following:

#### A. Assurance

Written assurance that the facilities will be properly decommissioned upon the project life or in the event that the facility is abandoned.

#### B. Cost estimates

The applicant shall provide a contractor cost estimate for demolition and removal of the WECS facility. The cost estimates shall be made by a competent party: such as a professional engineer, a contractor capable of decommissioning or a person with suitable expertise or experience with decommissioning WECS.

#### C. Financial assurance

Applicant 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, for the cost of decommissioning each tower and related improvements constructed under the permit. Said security will be released when each tower is properly decommissioned as determined by the Pulaski County Building Commissioner.

# 6.2 Discontinuation & Abandonment

#### A. Discontinuation

All WECS shall be considered a discontinued use after one (1) year without energy production, unless a plan is developed and submitted to the Pulaski County Building Department outlining the steps and schedule for returning the WECS to service.

# B. Abandonment by the owner or operator

In the event of abandonment by the owner or operator, the applicant will provide an affidavit to the Pulaski County Building Department 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 one (1) year of expiration or earlier termination of the project.

# 6.3 REMOVAL

An applicant's obligations shall include removal of all physical material pertaining to the project improvements to no less than a depth of four (4) feet below ground level within three hundred

sixty-five (365) days of the discontinuation or abandonment of the facility, and restoration of the project area to as near as practicable the condition of the site immediately before construction of such improvements by the owner, or by Pulaski County at the owner's expense.

# 6.4 Written Notices

Prior to implementation of the existing procedures for the resolution of such default(s), the appropriate County body shall first provide written notice to the owner and/or operator, setting forth the alleged default(s). Such written notice shall provide the owner and/or operator a reasonable time period not to exceed sixty (60) days, for good faith negotiations to resolve the alleged default(s).

# 6.5 Costs Incurred By The County

If the County removes a tower and appurtenant facilities, it may sell the salvage to defray the costs of removal. By approval, the permitted or grantor grants a license to Pulaski County to enter the property to remove a tower pursuant to the terms of an approved decommissioning plan.

# SECTION VII: LIABILITY INSURANCE

The owner or operator of any WECS shall maintain a current general liability policy covering bodily injury and property damage and may be required to name Pulaski County as an additional insured with dollar amount limits per occurrence, in the aggregate, and a deductible, which is suitable to the County.

Home owners that have electrical power generating equipment of 10 kw or less on their property need to carry \$100,000.00 of liability insurance. The owner of any electrical power generating equipment over 10 kw that is directly connected to the local utility provider is required to carry a minimum of 1 million dollars of liability insurance.

# Section VIII: Application Procedures

Permits and variances shall be applied for and reviewed under the procedures established by this Ordinance, except that the application for a commercial WECS Improvement Location Permit shall also include the following information:

# 8.1 Applications For All Wind Energy Conversion Systems

An application for ALL WECS shall include the following information:

# A. Contact information of project applicant

The name(s), address(es), and phone number(s) of the applicant(s), as well as a description of the applicant's business structure and overall role in the proposed project.

# B. Contact information of current project owner

The name(s), address(es), and phone number(s) of the owner(s), as well as a description of the owner's business structure and overall role in the proposed project, and including

documentation of land ownership or legal control of the property on which the WECS is proposed to be located. The Area Plan Commission shall be informed of any changes in ownership.

# C. Contact information of project operator

The name(s), address(es), and phone number(s) of the operator(s), as well as a description of the operator's business structure and overall role in the proposed project.

# D. Legal description

The legal description, address, and general location of the project

# E. Project description

A WECS Project Description, including to the extent possible, information on each wind turbine proposed, including:

- 1. Number of turbines;
- 2. Type;
- 3. Name plate generating capacity;
- 4. Tower height;
- 5. Rotor diameter;
- 6. Total height;
- 7. Anchor base:
- 8. The means of interconnecting with the electrical grid;
- 9. The potential equipment manufacturer(s); and
- 10. All related accessory structures.

# F. A site layout plan

A site plan, drawn to scale, including distances and certified by a registered land surveyor. All drawings shall be at a scale not smaller than one inch equals fifty feet (1"=50") with a scale of one inch equals thirty feet ("1=30") being preferred. Any other scale must be approved by the Executive Director. No individual sheet or drawing shall exceed twenty-four inches by thirty-six inches (24" x 36").

# G. Engineering certification

For all WECS, the manufacturer's engineer or another qualified registered professional engineer shall certify, as part of the building permit application, that the turbine, foundation and tower design of the WECS is within accepted professional standards,

given local soil and climate conditions. An engineering analysis of the tower showing compliance with the applicable regulations and certified by a licensed professional engineer shall also be submitted. The analysis shall be accompanied by standard drawings of the wind turbine structure, including the tower, base, and footings.

# H. Proof of correspondence and cooperation with wildlife agencies

For the purposes of preventing harm to migratory birds and in compliance with the Migratory Bird Treaty Act, the applicant shall provide written documentation that he or she is in direct correspondence and cooperation with the U.S. Fish and Wildlife Service and the Indiana Department of Natural Resources.

# 8.2 Applications For NON-COMMERCIAL Wind Energy Conversion Systems

In addition to the application requirements listed for "Applications for ALL Wind Energy Conversion Systems," applications for NON-COMMERCIAL WECS shall also include the following information:

# A. Demonstration of energy need

The primary purpose of the production of energy from a Non-Commercial WECS shall be to serve the energy needs of that tract. The applicant(s) shall demonstrate how much energy is needed and how the proposed size and number of the WECS fulfills this need. Net-metering may be allowed, but shall not be the primary intent of the WECS.

# B. Statement of FAA compliance

A statement of compliance with all applicable FAA rules and regulations, including any necessary approvals for installations within close proximity to an airport.

# C. Utility notification

No NON-COMMERCIAL WECS shall be installed until evidence has been given that the local utility company has been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.

# D. Compliance with National Electrical Code

A line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code. This information is frequently supplied by the manufacturer.

# 8.3 Applications For COMMERCIAL WIND Energy Conversion Systems

In addition to the application requirements listed "Applications for ALL Wind Energy Conversion Systems," applications for COMMERCIAL WECS shall also include the following information:

## A. A preliminary site layout plan

In place of the site layout plan described in "Applications for ALL Wind Energy Conversion Systems," an application for a COMMERCIAL WECS shall include a preliminary site layout plan with distances drawn to scale illustrating the following:

- 1. Property lines, including identification of adjoining properties
- 2. The latitude and longitude of each individual wind turbine, along with individual identification of each WECS.
- 3. Dimensional representation of the structural components of the tower construction including the base and footings
- 4. WECS access roads
- 5. Substations
- 6. Electrical cabling
- 7. Ancillary equipment
- 8. Primary structures within one quarter (1/4) mile of all proposed WECS
- 9. Required setback lines
- 10. Location of all public roads which abut, or traverse the proposed site
- 11. The location of all above-ground utility lines within a distance of two (2) times the height of any proposed WECS structure.
- 12. The location of any historic or heritage sites as recognized by the Division of Historic Preservation and Archeology of the Indiana Department of Natural Resources, within one (1) mile of a proposed WECS
- 13. The location of any wetlands based upon a delineation plan prepared in accordance with the applicable U.S. Army Corps of Engineers requirements and guidelines, within one (1) mile of a proposed WECS
- 14. Any other item reasonably requested by the Board of Zoning Appeals.
- B. Topographic map

A USGS topographical map, or map with similar data, of the property and the surrounding area, including any other WECS within ten (10) rotor distance, but no less than a one quarter (1/4) mile radius from the proposed project site, with contours of not more than five (5) foot intervals.

C. Noise profile

- D. Location of all known WECS within one (1) mile of the proposed WECS, including a description of the potential impacts on said WECS and wind resources on adjacent properties.
- E. Copy of the Communications Study

## 8.4 AGGREGATED PROJECT APPLICATIONS

Aggregated projects may jointly submit a single application and be reviewed under joint proceedings, including notices, hearing, and reviews and as appropriate, approvals.

# A. Aggregated projects

Permits for aggregated projects will be issued by construction phases and recorded separately, as prescribed in this Ordinance.

# Section IX: Pre-Construction Requirements

Prior to the issuance of any Building Permit, the following shall be submitted to and reviewed by the Building Inspector, who shall certify that the following are in compliance with all applicable regulations:

## 9.1 FAA PERMIT APPLICATION

An FAA permit application.

# 9.2 Decommissioning Plan

A decommissioning plan as prescribed in this Ordinance.

# 9.3 Economic Development, Drainage, & Road Use & Maintenance Agreements

An Economic Development Agreement, a Drainage Agreement, and a Road Use and Maintenance Agreement approved by the County Commissioners. The agreement shall be developed in conjunction with the Pulaski County Economic Development office. This agreement must be signed before any Building Permit is issued. The Drainage Agreement must prescribe or reference provisions to address crop and field tile damages.

# 9.4 Erosion Control Plan

An erosion control plan developed in consultation with the Natural Resources Conservation Services (NRCS), and any storm water quality management plan adopted by the applicable jurisdiction.

## 9.5 Utility Plan

A utility plan drawn to the same scale as the site plan illustrating the location of all underground utility lines associated with the total WECS project.

# 9.6 Final Site Layout Plan

Provide a copy of the Final Site Layout Plan illustrating the final location of all that is required in the preliminary site layout plan, as approved by the landowner.

# 9.7 Avoidance & Mitigation Of Damages To Public Infrastructure

In addition to complying with the approved Road Use and Maintenance Agreement, an applicant, owner, or operator proposing to use any county road(s), for the purpose of transporting COMMERCIAL WECS or substation parts and/or equipment for construction, operation or maintenance of a COMMERCIAL WECS or substation, shall comply with the following preconstruction requirements.

# A. Identification of roads and services

Identify all roads and services, to the extent that any proposed routes that will be used for construction and maintenance purposes shall be identified. If the route includes a public road, it shall be approved by the Pulaski County Highway Department.

# B. Pre-construction survey

The applicant shall conduct a pre-construction baseline survey acceptable to the Highway Superintendent to determine existing road conditions for assessing potential future damage. The survey shall include photographs, or video, or a combination thereof, and a written agreement to document the condition of the public facility.

# Section X: Construction Requirements

During construction, the applicant shall demonstrate that the following requirements are being met:

## 10.1 Dust Control

Reasonable dust control measures shall be required by the County during construction of a COMMERCIAL WECS.

# 10.2 Drainage

Reasonable storm water best management practices as required by the approved Drainage Plan/Agreement on file with the Pulaski County Surveyor.

## Section XI: Post-Construction Requirements

Post-construction, the applicant shall comply with the following provisions:

## 11.1 ROAD REPAIRS

Any road damage caused by the construction of project equipment, the installation of the same, or the removal of the same, shall be repaired to the satisfaction of the Pulaski County Highway

Superintendent. The superintendent may choose to require either remediation of road repair upon completion of the project or are 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 superintendent to insure the county that future repairs are completed to the satisfaction of the unit of local government. The cost of bonding is to be paid by the applicant.

# 11.2 As-Built Plans Requirement

Where upon completion of all development, the exact measurements of the location of utilities and structures erected during the development are necessary for public record and shall therefore be recorded. The applicant, owner, or operator shall submit a copy of the Final Construction Plans (as-built plans), as amended, to the Building Inspector with the exact measurements thereon shown. The Building Inspector, after being satisfied that the measurements are substantially the same as indicated on the originally approved final plan(s), shall approve, date and sign said Construction Plans for the project, which the applicant, owner, or operator shall then record.

## 11.3 Change In Ownership

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

Effective Date: Wind Energy Convergence Ordinance
The Wind Energy Convergence Ordinance shall be in full force and effect as ofafter its passage, approval and publication according to law.
Passed and adopted by the County Commissioners of the County of Pulaski County, Indiana on
·_
County Commissioners Of The County Of Pulaski County, Indiana
Attest:
Country Auditor
County Auditor