# COMMONWEALTH OF KENTUCKY MASON FISCAL COURT ORDINANCE NO. 14-09

AN ORDINANCE ADOPTING FINDINGS OF FACT, CONCLUSIONS OF LAW AND RECOMMENDATIONS OF THE MASON COUNTY JOINT PLANNING COMMISSION PERTAINING TO WIND ENERGY CONVERSION SYSTEMS (WECS); AMENDING ORDINANCE NO. 02-07 CONSISTENT WITH THE ADOPTION OF SUCH RECOMMENDATIONS; LIMITING LARGE SCALE WECS TO THE RURAL INDUSTRIAL ZONES (I-3) AND CREATING PERMIT REQUIREMENTS, SETBACKS AND REGULATIONS REDUCING THE IMPACT THEREOF; PERMITTING SMALL SCALE WECS AND MID-SCALE WECS AS ACCESSORY USES; IMPOSING ADDITIONAL REQUIREMENTS FOR SUCH ACCESSORY USES; ADOPTING DIMENSIONAL RESTRICTIONS FOR THE I-3 DISTRICTS; AND REPEALING ORDINANCE NO. 14-04.

WHEREAS, the Mason County Joint Planning Commission on its own initiative considered issues pertaining to Wind Energy Conversion Systems in Mason County, and particularly whether such uses were appropriate within the County, or certain land use districts located therein; and

WHEREAS, the Mason County Joint Planning Commission conducted a public hearing on May 12, 2014, and submitted Findings of Fact, Conclusions of Law and Recommendations to the Mason Fiscal Court for consideration; and

WHEREAS, the Mason Fiscal Court declines to hold additional public hearings or to take further comment, and instead considers this matter solely on the record from the public hearing held by the Mason County Joint Planning Commission, in accordance with KRS 100.211(3)(SEE Louisville v. McDonald, Ky. App., 470 SW2d 173 (1971)); and

WHEREAS, the Mason Fiscal Court hereby ACCEPTS the recommendations of the Mason County Joint Planning Commission, and AMENDS the text of Ordinance No. 02-07 (hereinafter "the Ordinance") as provided herein.

NOW THEREFORE, be it ORDAINED by the Mason Fiscal Court as follows:

## I. DEFINITIONS.

Additional definitions shall be incorporated in Article V of the Ordinance, as follows:

WECS: 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, substation, operational meteorological towers, communications facilities, and other required facilities and equipment, as related to the WECS project. Additional definitions applicable to WECS regulations contained in this Ordinance are set forth below:

- A. Critical Wind Speed: The wind at which a WECS turbine sound pressure levels are at greatest variance with ambient background sound pressure levels.
- B. **Decibels, A-Weighted:** Abbreviated as dB(A) are an expression of the relative loudness of sounds in air as perceived by the human ear. In the A-weighted system the decibel levels of sounds at low frequencies are reduced compared with unweighted decibels in which no correction is made for audio frequency. This correction is made because the human ear is less sensitive at low audio frequencies, especially below 1000Hz, than at higher audio frequencies.
- C. **Decibels, C-Weighted**: Abbreviated as dB(C) is a scale at that measures peak levels of sound and is useful in measuring sound pressure waves at lower frequencies that may be inaudible to the human ear.
- D. Industrial Scale WECS: A Wind Energy Conversion System constructed on the property of another by a company or corporation or other entity, whose general intent is to capture wind energy and place it on the electrical grid for resale to a public utility or other energy marketer.
- E. Meteorological Tower: Towers which are erected primarily to measure wind speed and direction plus other data in order to validate a proposed WECS project. These are intended to be temporary in nature, are allowed as per table 406.62 and permits for which must be renewed after the expiration of five years with the option of an annual permit extension for year 6 and 7. Meteorological towers must be setback a minimum of 1.5 times the height of the tower from any structure, property line, power line, or road right-of-way.
- F. Meteorological Tower, Operational Support: Towers which are erected primarily to measure wind speed and direction plus other data in support of an operating WECS. These are generally considered to be in place for the life of the project and should be included in the site plan subject to general project approval. Meteorological towers must be setback a minimum of 1.5 times the height of the tower from any structure, property line, power line, or road right-of-way.
- G. Mid-Scale WECS: A Wind Energy Conversion System with a generating

- capacity up to 50 Kw, the installation intended to collect wind energy for the purpose of supplying energy to the owners and shall not entail net metering. Mid-Scale WECS are considered a non-residential accessory use.
- H. Non-Participating Landowner: A person(s) or entity who has not entered into any contractual agreement with a company or entity with the intention of developing a WECS Project on or near such person(s) or entity's land and is not participating contractually to receive certain economic benefits to accrue from the development and operation of the WECS Project.
- I. Operator: The entity who runs the day to day operations of the industrial WECS. The operator may or may not be part of the parent company and may operate the project on a contractual basis. For the purposes of this ordinance the operator is understood to be a responsible party and all applicable provisions of this ordinance and all agreements shall apply equally to an applicant, owner, operator or successor.
- J. Owner: The entity that currently owns the project, which could change over time, but is understood to be responsible to operate according to the provisions of this Ordinance and is bound by any of the agreements entered into by itself, its predecessor(s), successors or assigns.
- K. Participating Landowner: A person(s) or entity who has entered into an executed contractual agreement with a company or entity with the intention of developing a WECS Project on or near such person(s) or entity's land and is participating contractually to receive certain economic benefits to accrue from the development and operation of the WECS Project.
- L. Small-Scale WECS: A Wind Energy Conversion System designed to provide power to a home or other local site for use by the owner. Small-Scale WECS may have a generating capacity of up to 5 Kw and shall not entail net-metering capability. Small-scale WECS are considered non-residential accessory structures.
- M. Successor: Any person, partnership, LLC or other corporate entity that purchases, leases or otherwise acquires an interest in all or a portion of a WECS Project from an applicant, owner or successor. For the purposes of this Ordinance all applicable provisions of this ordinance and all agreements shall apply equally to an applicant, owner, operator or successor.
- N. **Substation**: A structure containing apparatus that connects the below or above-ground electrical collection lines of the WECS to the electricity grid, with or without increasing the voltage.

- O. **WECS Project**: A collection of multiple WECS as specified in the application for development plan approval and/or improvement location permit.
- P. WECS Salvage Value: The net value of towers, nacelles, generators, turbines, blades, wires, transformers and all other salvageable parts and commodities which make up the WECS whether sold as used parts or on a commodity/scrap basis or any combination thereof (whichever is greater) after deducting all estimated costs and expenses of dismantling, removal, and transportation and all costs and expenses of sale (including but not limited to all commissions and fees) and the amount necessary to pay and satisfy all liens, security interests and all other encumbrances attached to the WECS. The commodity/scrap value shall be based on the five (5) years average scrap value of the commodities.
- Q. WECS Tower: The support structure to which the nacelle, with turbine and rotor are attached. Sometimes the term is used to refer to the tower, nacelle, turbine and rotor collectively.

## II. INDUSTRIAL SCALE WECS.

A new chapter 414 is created, inclusive of new sections 414.01 through 414.15, as follows:

#### 414.01 PURPOSE

The purposes of this Section are to:

- A. Assure that any development of industrial scale wind energy projects within Mason County, Kentucky, is safe and effective; and
- B. Provide a framework for development for wind energy resources which balances the benefits of renewable energy production with protection of agriculture, existing residential use and existing built environment.

#### 414.02 INTENT

It is the intent of these industrial scale wind energy conversion systems regulations to provide a regulatory framework for the siting, construction and operation of industrial scale wind energy conversion systems, hereafter referred to as industrial scale WECS, within Mason County, consistent with the Comprehensive Plan for such jurisdiction and consistent with Sections 100 (Mission Statement) and 202 (Purpose) of this ordinance.

#### 414.03 APPLICABILITY

The provisions of this Section are applicable to those districts which permit industrial scale wind energy conversion systems within Mason County, Kentucky, and governs the siting of industrial scale WECS and related substation, maintenance facilities and other accessory facilities, as defined, that are ancillary to industrial scale WECS. Any reference to applicant, owner, operator or successor is intended to refer to an entity that is a responsible party in terms of being continually required to abide by the provisions of this Ordinance and similarly is bound by any agreement entered into with the Judge/Executive or other appropriate executive authority of Mason County, Kentucky.

#### 414.04 PROHIBITION

No entity or applicant shall construct, operate, or locate an industrial scale WECS within Mason County, Kentucky, without first having applied for and obtained a permit under this Section 414 and having fully complied with the provisions hereof.

#### 414.05 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. Nor are they intended to interfere with, abrogate, or annul any other ordinance, rule, or regulation, statute or other provisions 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.

#### 414.06 DISTRICT REGULATIONS

- A. Location. Industrial scale WECS are permitted only in districts as specified in Chapter 406, Land Use Classification and Designation.
- B. Height. Industrial scale WECS or Operational Support Meteorological Towers for Industrial scale WECS are not specifically limited by this ordinance but are subject to those height limitations promulgated by Federal Aviation Administration.

# 414.07 SETBACK REQUIREMENTS

#### A. Minimum Setback Distances for INDUSTRIAL SCALE WECS TOWERS.

Distance from a	Minimum Setback Distance
Property line, measured from the center of the WECS Tower to the property line.	One Mile, (5,280 Feet)

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One Mile, (5,280 Feet)
One Mile, (5280 Feet)
One Mile, (5,280 Feet)
One Mile, (5,280 Feet)

<sup>1</sup> The setback shall be measured from future public rights-of-way width of a planned public road improvement or expansion is known at the time of application.

# B. Industrial Scale WECS Ancillary Structure Setback

1. Industrial scale WECS's ancillary structures such as substations and maintenance and operation facilities are considered principle structures and subject to principle structure setbacks unless otherwise specified herein or if specifically identified as

an accessory structure in Section 408.2.

For all poles carrying overhead wiring connecting Industrial scale WECS towers
to a Substation for connection to a utility's electric transmission line, there are no
setback requirements from property lines as long as the poles are located within a
recorded easement for such purpose.

#### 414.08 SAFETY DESIGN AND INSTALLATION STANDARDS

# A. Equipment Type

- 1. All turbines shall be constructed of commercially available equipment.
- Experimental or proto-type equipment still in testing which does not fully comply
  with industry standards, may be approved by the Board of Adjustment per the
  variance process established by this Ordinance.
- 3. Industrial scale WECS towers shall be of tubular construction or appearance, not guyed or with exposed girders.

#### B. Industry Standards and Other Regulations

All industrial scale 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, DNV-GL, or an equivalent third party.

# C. Controls and Brakes

- Braking System. All industrial scale WECS towers 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.
- 2. Operation Mode. All mechanical brakes shall be operated in a fail-safe mode.

## D. Electrical components

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

- 2. Collection Cables. All electrical collection cables between each WECS tower shall be located underground wherever possible.
- 3. Transmission lines/Distribution lines. All transmission and/or distribution lines that are buried should be at a depth consistent with or greater than local utility and telecommunication underground lines standards.
- E. Color and Finish. In addition to all applicable Federal Aviation Administration requirements, the following shall also apply to all WECS:
  - 1. All wind turbines and towers that are part of an industrial scale WECS project shall be white, grey, or another unobtrusive color.
  - 2. All blades shall be white, grey, or another unobtrusive color. Blades may be black in order to facilitate deicing.
  - 3. Finishes shall be matte or non-reflective.

## F. WECS Warnings and Notices.

The following notices shall be clearly visible on industrial scale 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 WECS tower showing an emergency telephone number.
- 4. The manual electrical and/or overspeed shutdown disconnect switch(es) shall be clearly labeled.
- 5. Sign or signs shall be posted on the pad-mounted transformer and the Substation(s) warning of high voltage.
- 6. Private roads providing access to Industrial scale WECS shall have posted an Emergency-911 address private road sign.

#### G. Climb Prevention

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

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

#### H. Blade Clearance

The minimum distance between the ground and any protruding blades(s) utilized on all industrial scale WECS towers shall be twenty-five (25) feet, as measured at the lowest point of the arc of the blades.

# I. Lighting

All lighting, including lighting intensity and frequency of strobe, shall adhere to but not exceed requirements established by Federal Aviation Administration (FAA) and this Ordinance and must incorporate an FAA-approved Aircraft Detection System (ADS) lighting control, activating lighting only when aircraft are in the vicinity of the turbine, to minimize potential for nuisance.

# J. Materials Handling, Storage and Disposal

- Solid wastes. All solid wastes whether generated from supplies, equipment, parts, packaging, operation or maintenance of the WECS, including old parts and equipment related to the construction, operation and/or maintenance of the WECS shall be removed from the site promptly and disposed of in accordance with all federal, state, and local laws.
- 2. 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.

# K. Shadow Flicker

- 1. Flicker which results from the passage of the blades of a rotating wind turbine between the sun and any occupied structure shall be limited to the following:
  - a. No more than 30 minutes a day.
  - b. No more than 30 hours a year.

- 2. Evidence that the limits pertaining to shadow flicker have not been exceeded will be provided in the form of a model done for the project that is certified by a competent professional utilizing the following conditions in the model:
  - a. Sun is always shining during the day.
  - b. Wind is always blowing, i.e. blades are always spinning.
  - c. Wind direction is always favorable for generating shadow flicker at the receiver.
  - d. The applicant is required to use available technology to detect conditions when shadow flicker would occur and turn off the turbine during the time when those conditions are present to prevent shadow flicker (e.g., Shadow Detection System). If the applicant does not intend to employ a Shadow Detection System or equivalent system, then a narrative justification shall be included in the application indicating why such system is not being utilized, and the permit may contain a waiver of such requirement, but such waiver is entirely discretionary. If the technology is applied and used to completely prevent shadow flicker, then the above requirements to perform to the worst case analysis are waived.

#### 414.09 OTHER APPLICABLE STANDARDS

#### A. Guyed Wire Anchors

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

#### B. Sewer and Water

All facilities or structures that are part of the industrial scale WECS project shall comply with the existing septic and well regulations as required by the Mason County, Kentucky Health Department and/or the State of Kentucky Department of Public Health.

- C. Noise and Vibration
- 1. No turbine shall be located so as to create a decibel level greater than 30 dBa at the property line of the parcel in which the turbine is located and also less than 50 dB(C) at the property lines of the parcel in which the turbine is located.
- 2. The application shall include a pre-construction sound study that establishes the ambient sound conditions in the proposed project area and surrounding the project area with a perimeter of one mile. The sound study shall be performed by a

certified independent acoustical engineer. The sound study must provide a description of the testing, sampling and process methodology used in determining the ambient measurement. The firm with which the engineer is associated shall be a member of the National Council of Acoustical Consultants (NCAC) with a specialty in environmental noise, and the independent acoustical engineer shall be a Member, Board Certified of the Institute of Noise Control Engineering of the USA.

- Within twelve months after the date when the project is fully operational the operator shall conduct a two phased post-construction sound study conducted by an independent accredited sound engineer chosen by the Planning Commission and paid for by the applicant/owner. Post-construction sound level measurements shall be taken both with all WECS running and with all WECS off. The post-construction measurements shall be reported to the Planning Commission and made available for public review.
- 4. If sound measurements from the post-construction analysis show levels above what is permitted by the ordinance, the operator shall take all necessary steps to remediate the problem, up to and including shutting down the offending turbine(s).

#### D. Utility Interconnection

The WECS, if interconnected to a utility system, shall meet the requirements for interconnection and operate as prescribed by the applicable regulations and/or tariffs of the electrical utility or any other regulatory body with jurisdiction, as amended from time to time.

#### E. Signage

All signs pertaining to an industrial scale WECS project must comply with Section 411, Sign Regulations, unless otherwise specified as follows:

- 1. No sign shall exceed sixteen (16) square feet in surface area except development signs.
- 2. No sign shall exceed eight (8) feet in height.
- The manufacturers or owner's company name and/or logo may be placed upon the compartment containing the electrical equipment in accordance with customary practice.
- 4. An identification sign relating to the WECS Project development shall be located on each side of the total WECS Project area. There shall be no less than four (4)

and no more than six (6) signs. Development signs must be sized and placed in compliance with Section 411 and must include seven (7) day per week contact information to reach a responsible representative of the operator with authority to resolve problems associated with development of a WECS Project.

5. No other advertising signs or logos shall be placed or painted on any structure or facility with the exception of an identifying sign at the operation and maintenance facility.

#### F. Feeder lines

Feeder lines (lines at distribution levels) 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.

# G. Other appurtenances

No appurtenances other than those associated with the WECS construction, operations, maintenance, decommissioning/removal, and permit requirements shall be connected to any WECS Tower except with express, written permission by the Board of Adjustment.

## 414.10 OPERATION AND MAINTENANCE

# A. 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 Zoning Administrator/ Building Inspector for Mason County to determine whether the physical modification requires re-certification.

# B. Communications Interference

Prior to construction, a communications study to determine whether the proposed industrial scale WECS will have any adverse impacts on any public or public serving utility microwave transmissions shall be completed. If necessary, the applicant or successor shall mitigate interference with electromagnetic communications, such as radio, telephone, microwaves, or television signals caused by any WECS. In addition, the applicant or successor shall comply with the following:

1. Post-Construction. If, after construction of the WECS, the owner or operator receives a written complaint that can be substantiated through an independent

review related to interference with the broadcast of residential television, telecommunication, communication or microwave transmissions that existed prior to construction of the WECS, 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.

2. Failure to Remedy a Complaint. If an agreement to remedy a known interference is not reached within sixty (60) days, appropriate action will be taken. If further negotiations and/and or mitigation measures to reduce or eliminate the interference do not remedy the problem it may result in requiring the WECS to become inactive. This Section does not apply to interference with private telecommunications systems. See Complaint Procedure in subsection D below.

#### C. Declaration of Public Nuisance

Any utility scale WECS declared to be a hazard to public safety (unsafe) by the Fiscal Court of Mason County 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.

# D. Complaint Procedure

- 1. All complaints regarding utility scale WECS operation shall be logged by the Operator. At minimum the log shall describe the name and address of the complainant, contact information of the complainant, when the complaint is received, a detailed description of the nature of the complaint, action taken to resolve the complaint and the date the complaint is resolved. If any complaint is considered by the operator to not be the responsibility of the operator a reason shall be provided to the complainant and so noted on the log. The log must be sent to the Planning Office by a method mutually agreeable to the Zoning Administrator and the Operator at a frequency no less than once per month. Upon receipt of a formal complaint regarding noise, the WECS operator shall be responsible for conducting a specific focused sound study to ascertain facts associated with a specific study to address the concern of the complainant and shall be financially responsible for the study. The acoustical engineering firm that conducts the complaint generated sound study must be different than that of the firm that conducted the pre and post-construction studies and must also be similarly accredited.
- If after sixty (60) days there is no resolution of a registered complaint the
  complainant may provide notice to the Zoning Administrator on a form provided
  by the Planning Office accompanied by a fee of \$150.00 that they intend to enter

into binding arbitration of the unresolved complaint. Failure by the operator to perform an action specified by the arbitrator will be considered a violation of the zoning ordinance and subject to the applicable enforcement penalties and remedies. Upon receipt of a request for arbitration the Planning Office will arrange for a time and place to meet with the arbitrator. Upon approval of a WECS project the Operator shall continually fund a non-reverting fund (for arbitration only), which will contain no less than \$5,000 dollars at any time, for the life of the WECS project. Notification of the balance of the fund to the Operator shall be the responsibility of the Zoning Administrator, in a manner he or she sees fit. If upon notification that the fund is deficient, the Operator shall have sixty (60) days to bring the fund back to the prescribed minimum amount. If the payment is not satisfied within the sixty (60) days, the WECS project will be deemed in violation of the permit. The arbitrator shall be a member of the Kentucky Bar Association, be on the Roster of Court-Approved Mediators in the State of Kentucky and not be a citizen of Mason County, Kentucky. The Zoning Administrator may appear and present evidence.

#### 414.11 DECOMMISSIONING PLAN

Prior to filing an application for a permit under this Ordinance, the appropriate Executive authority with jurisdiction and the applicant or successor shall formulate a decommissioning plan outlining the responsibility for and anticipated means and cost of removing a utility scale WECS at the end of their serviceable life or upon becoming a discontinued or abandoned use in order to ensure that the WECS is properly decommissioned.

# A. Content of Decommissioning Plan

- Assurance. Written assurance that the WECS will be properly decommissioned upon the expiration of the project life or in the event that the WECS Project is abandoned.
- Cost Estimates. The applicant or successor shall provide a contractor cost estimate for demolition and removal of the WECS. 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 industrial scale WECS.
- 3. Financial Assurance. Prior to commencement of construction the applicant or its successor, as defined, will provide to the Executive of the appropriate jurisdiction a financial assurance for the cost of decommissioning each WECS tower and related improvements to be constructed under the permit. The financial assurance shall be in the form of a performance bond, surety bond, letter of credit or other security instrument mutually acceptable to the Executive and the Applicant or

# Applicant's Successor.

4. Abandonment by the Applicant or Successor. Written assurance that in the event of abandonment by the applicant or successor, the applicant or successor will provide an affidavit to the Executive of the appropriate jurisdiction representing that all easements and/or property leases for WECS towers shall contain terms that provide financial assurances, including access to the salvage value of the equipment, for the property owners to ensure that the WECS towers are properly decommissioned within one (1) year of expiration or earlier of termination of the WECS Project.

#### B. Discontinuation and Abandonment

All industrial scale WECS shall be considered a discontinued use after one (1) year without energy production, unless a plan is developed and submitted to the Zoning Administrator outlining the steps and schedule for returning the WECS to service. The Planning Commission may, at its discretion after one year of discontinued production, initiate an action to recommend to the Executive authority that it act to exercise the financial assurance to effect a decommissioning.

- 1. Removal. An applicant or successor'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 WECS or WECS Project, and restoration of the project area to as near as practicable to a condition similar to its previous use immediately before construction of such improvements. Below ground level is understood to be from the existing grade. Covering with fill material does not constitute removal. Removal obligations shall be completed by the applicant or successor or by the County at the former's expense.
- Written notices. Prior to implementation of procedures to effect the financial guarantee the appropriate Executive authority shall provide notice to the owner/operator according to the terms of the required Decommissioning Agreement. The owner of the project must provide notice to the appropriate Executive authority of its intention to change ownership, abandon, decommission or suspend operations of a utility scale WECS project.
- 3. Costs incurred by the County. If the City or County removes a WECS Tower and appurtenant facilities, it may sell the salvage to defray the costs of removal. By acceptance of a building permit, the applicant or operator grants a license to the appropriate Executive authority to enter the property to remove a WECS Tower and appurtenant facilities pursuant to the terms of an approved decommissioning plan.

#### 414.12 LIABILITY INSURANCE

The owner or operator of any industrial scale WECS shall maintain a current general liability policy covering bodily injury and property damage and shall be required to name the Mason Fiscal Court as an additional insured with dollar amount limits not less than \$2,000,000 per occurrence, \$5,000,000 in the aggregate, and a deductible which is reasonably industrial available and which is mutually suitable to the applicant or successor and the City or County.

## 414.13 APPLICATION PROCEDURES

A. Permits and variances for industrial scale WECS shall be applied for and reviewed under the procedures established by this Ordinance and shall include the following information:

- 1. Contact information of project applicant including 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.
- 2. 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 Zoning Administrator shall be informed of any changes in ownership.
- 3. Contact information of project operator. The name(s), address(es) and phone number(s) of the operator(s) if other than the owner. If the owner assigns a different operator at any time they are obligated to notify the Zoning Administrator.
- 4. Legal description-The legal description, address, and general location of the project.
- 5. A General WECS Project Description, including to the extent possible, information on each wind turbine proposed, including:
  - a. Number of turbines:
  - b. Manufacturer of turbines with brochure depiction;
  - c. Name plate generating capacity;
  - d. Tower height;

- e. Rotor diameter;
- f. Total height;
- g. Anchor base;
- h. The means of interconnecting with the electrical grid;
- I. If the applicant has a purchase power agreement (PPA) name the entity;
- All related accessory structures.
- 6. Site Layout Plan. A site layout plan, drawn at an appropriate scale, showing distances pertaining to all applicable setback requirements. The site layout plan must be certified by a registered land surveyor, and depict:
  - a. Property lines, including identification of adjoining properties, with a notation indicating participating and non-participating landowners;
  - b. The latitude and longitude of each individual WECS Tower, along with individual identification of each WECS Tower using the developer's numbering scheme;
  - c. WECS access roads;
  - d. Substations(s), and operational support meteorological tower(s) location;
  - e. Operation and maintenance building location (building to be permitted separately);
  - f. Electrical cabling;
  - g. Ancillary equipment;
  - h. Occupied structures within one mile of all proposed WECS towers;
  - i. Distances from each individual WECS tower to each setback requirement;
  - Location of all existing and planned public roads which abut, or traverse the proposed site;
  - k. The location of all above-ground utility lines within a distance of one mile

of any proposed WECS structure;

- 1. The location of any historic or heritage sites as within the WECS Project Area;
- m. 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; and
- n. A topographical map of the project area and a one mile perimeter with contours of not more than five (5) foot intervals.
- 7. Sound Study. A sound study that identifies all known occupied structures within one (1) mile of every proposed WECS tower, including a description of the potential sonic impacts of any WECS tower and on adjacent properties as per standards indicated in Section 414.09(C).
- 8. Communications Study. A communications study required by Section 414.10(B);
- 9. Shadow Flicker Study. A shadow flicker modeling study that identifies all known occupied structures and the effect of any WECS tower on those structures as per Section 414.08(K).
- 10. 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 foundation and tower design of the WECS is within accepted professional standards, given local soil and climate conditions. An engineering analysis of the WECS 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. The engineering certification may be completed following submission of an improvement location permit application on condition of being required no later than thirty (30) days prior to initiation of construction.
- 11. Utility Notification. Evidence that the pertinent electric utility company has granted approval for interconnection.
- 12. Statement of Federal Aviation Administration compliance. A statement of compliance with all applicable Federal Aviation rules and regulations, including any necessary approvals for installations within proximity to an airport.
- 13. Statement of Kentucky Airport Zoning Commission compliance. A statement of

compliance with all applicable Kentucky Airport Zoning Commission rules and regulations and any necessary approvals for installations within proximity to an airport.

- 14. Compliance with Fish and Wildlife Requirements. 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. Applicants shall provide documentation that they are in communication and cooperation with the U.S. Fish and Wildlife Service and the Kentucky Department of Natural Resources.
- 15. 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 typically supplied by the manufacturer.
- 16. Good neighbor Notice. An affidavit of service along with supporting documentation that indicates notification was given to all property owners (as per current records of the Mason County, PVA) in and within one mile of the proposed footprint of the WECS project no less than 30 days prior to the date of official approval sought by or on behalf of the applicant involving any City or County agency or body. The Notice shall contain at minimum:
  - a. A map showing the general layout of the project.
  - b. An opportunity to meet with the petitioner or contact information whereby questions may be asked by the public.
  - c. A list of steps that will required to accomplish the project.
- 17. Any other item reasonably requested by the Building Commissioner.

# 414.14 PRE-CONSTRUCTION REQUIREMENTS

Prior to the issuance of any building permit, the following shall be required and materials submitted and reviewed by the Building Commissioner, who shall certify that the submissions are in compliance with all applicable regulations:

- A. Federal Aviation Administration permits application and approval, if applicable.
- B. Decommissioning plan as described in Section 414.11.
- C. Economic Development Agreement, Drainage, and Road Use and Maintenance

Agreements required before issuance of an improvement location permit.

- 1. An Economic Development Agreement approved by the appropriate Executive authority shall be developed. The Executive authority may include other stakeholders in the negotiations at its discretion, and the applicant shall disclose all tax incentives, rebates or other arrangements with State or Federal government pertaining to the project.
- 2. A Road Use and Services Maintenance Agreement approved by the appropriate Executive authority that addresses, at minimum, the following:
  - a. A compilation of routes that will be used for construction and maintenance purposes, approved by the Highway Superintendent;
  - A documented baseline survey to determine existing road conditions prior to construction. The survey shall include photographs, or video, or a combination thereof, and a written agreement to document the condition of the public facility;
  - c. A surety bond or similar instrument approved by the County Attorney, in an amount sufficient to ensure that future repairs to public roads are completed to the satisfaction of the unit of local government. The cost of bonding is to be paid by the applicant. This requirement may be addressed in conjunction with the Economic Development Agreement;
  - d. A plan to address transportation routes and conditions during construction. If the route includes a public road, it shall be approved by the appropriate highway official(s) and school transportation departments;
  - e. A plan to avoid damage and to address repair to damaged roads;
  - f. A requirement that newly constructed WECS access roads will not impede the flow of water; and
  - g. Provisions to address crop, field tile, waterway and other infrastructure damage.
- D. An Erosion Control/Storm Water Plan compliant with any storm water quality management plan adopted by the State or local applicable jurisdiction.
- E. A Utility Plan drawn to the same scale as the site layout plan illustrating the location of all underground utility lines associated with the total WECS Project. This may be incorporated into the site plan.

F. A Dust Control Plan detailing reasonable measures to be employed to control dust during construction of a Industrial scale WECS Project. This may be incorporated into the Road Use and Services Maintenance Agreement.

# 414.15 POST-CONSTRUCTION REQUIREMENTS

A. Post-construction, the applicant or successor shall comply with the following provisions:

- 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 as per the Road Use and Services Maintenance Agreement.
- 2. As-Built Plans Requirement. Whereupon 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 or successor shall submit a copy of the final construction plans (as-built plans), as amended, to the Building Commissioner with the exact measurements shown thereon. The Building Commissioner, 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 or successor shall then record.
- 3. Post Construction Sound Study. Within twelve months after the date when the project is fully operational the operator shall conduct a two phased post-construction sound study conducted by an independent accredited sound engineer chosen by the Planning Commission and paid for by the applicant/owner. Post-construction sound level measurements shall be taken both with all WECS running and with all WECS off. The post-construction measurements shall be reported to the Planning Commission and made available for public review.
- 4. Change in Ownership. It is the responsibility of the owner 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 or change in operator.

#### III. ALLOWABLE USE CHART AMENDMENT.

The Allowable Use Chart at Section 406.6 is amended to reflect that Industrial Scale WECS and Meteorological Towers are only permitted in the Rural Industrial Zones (I-3), and such Allowable Use Chart shall be republished as follows:

Industrial / Manufacturing	R-1	R-2	R-3	R-4	TH-1	B-1	B-2	B-3	D-1	P-1	A-1	A-2	I-1	I-2	MH	C	RR-1	RR-2	I-3
Food & related	х	х	х	X	х	х	х	х	x	х	х	х	С	P	х	х	х	х	Р
Apparel & finished goods	Х	х	X	x	х	X	X	x	х	X	х	х	P	P	х	x	х	Х	Р
Lumber & wood products	X	x	x	x	X	X	X	X	x	x	X	X	P	P	X	X	X	X	P
Paper & related	X	x	X	X	X	X	X	X	X	X	X	X	P	P	X	X	X	Х	P
Printing/publishing	X	X	x	X	X	X	X	X	x	X	X	x	P	P	x	х	X	Х	P
Chemicals/petroleum	X	X	X	X	X	X	X	X	X	X	X	X	X	P	X	X	X	Х	Р
Rubber/plastics	X	X	X	X	X	X	X	X	x	x	X	X	X	P	X	X	X	X	P
Leather products	X	X	X	X	X	X	X	X	X	X	X	X	Х	P	X	X	X	X	P
Stone, clay, concrete, glass	X	X	X	X	X	X	X	X	X	X	X	X	X	P	X	X	Х	Х	P
Primary metals	X	X	X	X	X	X	X	X	X	X	X	X	X	P	X	X	X	X	P
Fabricated metal products	X	X	X	X	X	X	X	X	X	X	X	X	P	P	X	X	X	Х	P
Industrial equipment	X	$\mathbf{x}$	X	$\mathbf{X}$	X	X	X	X	X	X	X	X	C	P	X	X	X	X	P
Transportation equipment	X	X	X	X	X	X	X	X	X	X	X	X	C	P	X	X	X	X	P
Electronics	X	X	X	X	X	X	X	X	X	X	X	X	P	P	X	X	X	X	P
Impound lots	X	X	X	X	X	C	X	X	X	X	X	X	P	P	X	X	X	X	X
Recycling Center	X	X	X	X	X	X	X	X	X	X	C	C	P	P	X	C	X	Х	P
Recycling Plant**	X	X	X	X	X	X	X	X	X	X	X	C	P	P	X	C	X	X	P
Industrial-Scale WECS ***	X	X	X	X	X	X	X	X	X	X	Х	X	X	X	X	Х	X	Х	Р
Meteorological Tower ***	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Х	X	X	p

<sup>\*\*</sup> Must be located at least 1,000 feet from any residence in the A-2 and C Zones
\*\*\*Requires site plan review by Planning Commission prior to construction

# IV. SMALL SCALE WECS AND MID-SCALE WECS ARE PERMITTED AS ACCESSORY USE UNDER CERTAIN CONDITIONS:

# A. SMALL SCALE WECS.

- 1. Section 408.2(1) is amended to include small scale WECS as a permitted residential accessory use.
- 2. Sections 408.2(2) is amended to create additional requirements for small scale WECS and such requirements are to be set out as Subsections (a) through (e) as follows:

Small-Scale WECS are permitted as accessory residential uses provided that the following conditions are met:

- a. A site plan be provided that indicates the tower can be setback a minimum of 1.5 times the height of the WECS to the top of blade from any structure, property line, power line, or road right-of-way.
- b. Evidence is provided that the WECS has adequate overspeed protection system(s), does not exceed 5 Kw nameplate capacity, is not capable of net metering, is covered under the owner's liability insurance and conforms to the district height standards.
- c. If a WECS is inoperable for a period of one year it is considered abandoned and must be removed from the property. Abandoned WECS are considered to be a public nuisance.
- d. The owner of a WECS is responsible for mitigating any adverse effects of electromagnetic interference affecting another property owner as a result of the operation of the WECS. If the electromagnetic interference is proven to be sourced from the WECS and the problem is not rectified the WECS must be removed.
- e. The owner must demonstrate that the equipment will operate at less than 30 dB(A) and 50 dB(C) at the property line.

## B. MID-SCALE WECS.

- 1. Section 408.2(5) is amended to include mid-scale WECS in the permitted non-residential accessory structures in the non-residential districts.
- 2. Sections 408.2(5) is amended to create additional requirements for small scale WECS and such requirements are to be set out as Subsections (a) through (e) as follows:

Mid-Scale WECS are permitted as accessory non-residential uses provided that the following conditions are met:

- a. A site plan be provided that indicates the tower can be setback a minimum of 1.5 times the height of the WECS to the top of blade from any structure, property line, power line, or road right-of-way.
- b. Evidence is provided that the WECS has adequate overspeed protection system(s), does not exceed 50 Kw nameplate capacity, is not capable of net metering, is

covered under the owner's liability insurance and conforms to the district height standards.

- c. If a WECS is inoperable for a period of one year it is considered abandoned and must be removed from the property. Abandoned WECS are considered to be a public nuisance.
- d. The owner of a WECS is responsible for mitigating any adverse effects of electromagnetic interference affecting another property owner as a result of the operation of the WECS. If the electromagnetic interference is proven to be sourced from the WECS and the problem is not rectified the WECS must be removed.
- e. The owner must demonstrate that the equipment will operate at less than 30 dB(A) and 50 dB(C) at the property line.

# V. DIMENSIONAL REQUIREMENTS FOR I-3.

A. Section 406.4 is hereby amended to include dimensional requirements for the Rural Industrial (I-3) Districts to be incorporated within the table contained at such section:

Minimum Building area	5 acres

For single-family dwelling

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Non-residential uses	1 acre (43,560 sq. ft.)

Minimum	building site width	150 ft.
Millimin	building site width	130 11.

at front setback line

SETBACKS

Front	100 ft
Sides	50 ft.
Rear	50 ft.

Maximum Building Height. 75 ft.

NOTE: Setbacks for lots LESS THAN two (2) acres that were recorded BEFORE October 21, 2005 in the A-2 zone and I-3 zone, and lots LESS THAN two (2) acres in the

RR-2 zone (in which the development is in the interior of the property and a new County road is constructed) are as follows: Front- 50 feet; Sides- 25 feet; and Rear- 30 feet.

NOTE: A landowner may create no more than two lots within the A-1, A-2, or I-3 zones of less then five acres and not less than one acre. The plat shall depict the subject lot(s), together with contiguous property which is to be set aside by the landowner as a buffer zone and designated as such on the plat. The lot and contiguous acreage set aside by the landowner must be at least five acres. Residential development is not permitted within the buffer area.

#### VI. REPEAL OF ORDINANCE NO. 14-4.

Ordinance No. 14-4 creating a building code and inspection requirements for WECS is hereby repealed and held for naught, it appearing that such ordinance becomes redundant and unnecessary in light of the adoption of these amendments to Ordinance No. 02-07.

# VII. ORDINANCE NO. 02-07 TO BE REPUBLISHED AS AMENDED HEREBY.

Except as specifically amended hereby, Ordinance No. 02-07 shall remain in full force and effect, and shall be republished inclusive of these amendments.

Given first reading this 9th day of September, 2014.

Thereafter, given second reading, and unanimously adopted, after publication in accordance with KRS Chapter 424 this 30th day of September, 2014.

	Hon. James. L. Gallenstein Judge/Executive
ATTESTED BY:	
Clerk, Mason Fiscal Court	

# COMMONWEALTH OF KENTUCKY MASON FISCAL COURT ORDINANCE NO. 14-09

At the regular meeting of the Mason Fiscal Court held on September 9, 2014, an Ordinance pertaining to Wind Energy Conversion Systems was considered and given first reading. Such Ordinance is summarized as follows:

AN ORDINANCE ADOPTING FINDINGS OF FACT, CONCLUSIONS OF LAW AND RECOMMENDATIONS OF THE MASON COUNTY JOINT PLANNING COMMISSION PERTAINING TO WIND ENERGY CONVERSION SYSTEMS (WECS); AMENDING ORDINANCE NO. 02-07 CONSISTENT WITH THE ADOPTION OF SUCH RECOMMENDATIONS; LIMITING LARGE SCALE WECS TO THE RURAL INDUSTRIAL ZONES (I-3) AND CREATING PERMIT REQUIREMENTS, SETBACKS AND REGULATIONS REDUCING THE IMPACT THEREOF; PERMITTING SMALL SCALE WECS AND MID-SCALE WECS AS ACCESSORY USES; IMPOSING ADDITIONAL REQUIREMENTS FOR SUCH ACCESSORY USES; ADOPTING DIMENSIONAL RESTRICTIONS FOR THE I-3 DISTRICTS; AND REPEALING ORDINANCE NO. 14-04.

Such Ordinance will be given second reading and considered for adoption at the next regular meeting of the Mason Fiscal Court, on September 30, 2014, at 9:00 a.m.

Honorable James L. Gallenstein Judge/Executive

This summary prepared by:		
John F. Estill Mason County Attorney		
To be published	and	