

## ARTICLE 18

### WIND ENERGY CONVERSION SYSTEMS

#### **Section 1800 – Purpose & Intent**

The purpose of this Article is to regulate the placement, construction, and modification of Mini WECS, SWECS, and Wind Energy Conversion Systems (WECS) in Dearborn County. The regulations set forth herein have been formulated to facilitate economic opportunities for the local economy and to protect the health, safety, and general welfare of the public as these improvements are commissioned. The provisions of this Article will:

1. Establish a reasonable and efficient process for the review and approval of Mini WECS, SWECS, and WECS applications;
2. Prescribe required distances for setbacks for Mini WECS, SWECS, and WECS from buildings, property lines, and easements;
3. Institute minimum performance regulations for Mini WECS, SWECS, and Wind Energy Conversion Systems;
4. Create standards for the removal of Mini WECS, SWECS, and WECS and their appurtenant structures.

#### **Section 1802 – Definitions**

For the purposes of this Ordinance, the defined words, terms, phrases, abbreviations, and their derivations shall have the meanings given in this Section.

**“Mini Wind Energy Conversion System” or “Mini WECS”** means the system by which wind energy is converted to electricity using a wind turbine, tower, support system, blades, and associated control and conversion electronics which has a rated capacity less than ten (10) kW and a system height of less than forty-five feet (45’). For the purposes of this Ordinance, a roof-mounted structure shall be considered a Mini WECS if it meets the rated capacity and height requirements set forth in this Section. **Only one (1) Mini Wind Energy Conversion System may be permitted per principle structure. Mini WECS shall be considered an accessory use in all Zoning Districts.**

**“Small Wind Energy Conversion System” or “SWECS”** means the system by which wind energy is converted to electricity using a wind turbine, tower, support system, blades, and associated control and conversion electronics which has a rated capacity of less than, or equal to, one-hundred (100) kW and a system height of less than eighty feet (80’). **Only one (1) Small Wind Energy Conversion System may be permitted per principle structure. SWECS shall be considered a Principally Permitted Use in all agricultural (A), commercial (B-1, B-2) and industrial (I-1, I-2, I-3) zones and as a Conditional Use in all Residential Districts.**

**“Wind Energy Conversion System” or “WECS”** means the system by which wind energy is converted to electricity using a wind turbine, tower, support system, blades, and associated control and conversion electronics which has a rated capacity of more than one-hundred (100) kW or a system height of more than eighty feet (80’). **WECS shall be considered a Principally Permitted Use in intense commercial (B-2) and industrial (I-1, I-2, I-3) zones and as a Conditional Use in all Agricultural (A), Residential (R), and Local Business (B-1) Districts.**

**“Applicant”** means the entity or person who submits to the County, pursuant to this Article, an application for the siting of any WECS or substation or thereafter operates or owns a WECS.

**“Financial Assurance”** means an insurance performance bond or one irrevocable, unconditional letter of credit, either one of which must be obtained from a single financial institution licensed in the State of Indiana.

**“Free Fall Area”** means the area in the shape of a circle surrounding the WECS whose radius is the height of the structure plus ten percent (10%) of the height of the WECS or structure.

**“Modification”** means the addition, removal or change of any of the physical and visually discernable components or aspects of a Wind Energy Conversion System. A modification shall not include the replacement of any components of a Wind Energy Conversion System where the replacement is identical to the component being replaced or for any matters that involve the normal repair and maintenance of a Wind Energy Conversion System without addition, removal or discernable change.

**“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.

**“Permit”** means a Zoning Permit, unless specifically noted otherwise in this Article.

**“Professional Engineer”** means a qualified individual who is licensed as a professional engineer in the State of Indiana.

**“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.

**“State”** means the State of Indiana.

**“WECS Project”** means the collection of WECSs and substations as specified in the siting approval application pursuant to this Ordinance.

**“WECS Tower” or “Tower”** means the support structure to which the nacelle and rotor are attached, free standing or guyed structure that supports a wind turbine generator.

“WECS Tower Height” means the distance from the rotor blade at its highest point to the top surface of the WECS foundation.

### **Section 1804 – Wind Energy Conversion Systems Not Requiring a Zoning Permit**

Mini WECS or SWECS structures may be established to serve an existing agricultural use. These structures may not exceed 45 feet in height and must be situated fifty (50) feet from both all property lines and overhead utility easements to be exempt from the provisions set forth later in this Article. **Although a Zoning Permit may not be required for Mini WECS or SWECS and appurtenant structures of this type, a Building Permit is required and must be applied for and approved prior to any site work.**

### **Section 1806 – General Requirements for all Wind Energy Conversion Systems**

The design and construction of all Mini WECS, SWECS, or Wind Energy Conversion Systems shall meet the following standards:

1. All applicants shall construct, operate, maintain, repair, provide for removal of, modify or restore the permitted system in strict compliance with all current applicable technical, safety and safety-related codes adopted by Dearborn County, the State of Indiana, or the United States. The codes referred to are codes that include, but are not limited to, construction, building, electrical, fire, safety, health, and land use codes. In the event of a conflict between or among any of the preceding the more stringent shall apply;
2. All applicants shall obtain, at their own expense, all permits and licenses required by applicable law, rule, regulation or code, and must maintain the same, in full force and effect, for as long as required by Dearborn County or any other governmental entity or agency having jurisdiction over the applicant;
3. All applicants shall notify the County of any intended modification of a Mini WECS, SWECS, or Wind Energy Conversion System and shall apply to the County to modify the height, relocate or rebuild such structure;
4. All Wind Energy Conversion Systems shall conform to applicable industry standards of the American National Standards Institute (ANSI) and be approved by a wind certification program recognized by the American Wind Energy Association. **All WECS that are over twenty-five (25) feet in height must be designed by a professional engineer.** The engineer must certify that the foundation and tower constructed for the Wind Energy Conversion System is within acceptable code and industry standards—given local soil and climate conditions.

### **SECTION 1808 - Required Zoning Permit**

All applicants involving a new Mini WECS, SWECS, or Wind Energy Conversion System, or an existing Mini WECS, SWECS, or Wind Energy Conversion System that involves a visible modification, are required to obtain the proper permit that is in accordance with the requirements of this Article. The individual zoning district articles indicate whether a Wind Energy Conversion System is a Principally Permitted Use or Conditional Use, which determines the required process. All Mini WECS and SWECS that are considered Principally Permitted Uses shall follow the Plot Plan Review procedure as detailed in Article 17 of this Ordinance. All WECS shall follow the Site Plan Review procedure as detailed in Article 23 of this Ordinance, in addition to a Conditional Use process, if necessary. All Conditional Uses shall follow the Conditional Use procedure as detailed in Article 3. Applications for the modification of an existing structure that does not increase the overall height or appearance shall be considered a Principally Permitted Use. If it is determined that the application meets the purpose and intent of this Article, the application shall be approved. If it is determined that the application does not meet the purpose and intent of this Article, the application shall be denied with the specific reasons detailed.

No Wind Energy Conversion System of any type shall be installed or constructed until the application is reviewed and approved by the County, and a permit has been issued. The County may at its discretion delegate or designate other official agencies to accept, review, analyze, evaluate and make recommendations with respect to the approval, or denial, of proposed Wind Energy Conversion System. Any permit issued for Wind Energy Conversion System shall not be assigned, transferred or conveyed without the express prior written notification to the County.

### **SECTION 1810 - Pre-Application Meeting**

Prior to the submittal of an application that does not involve an exempt Mini WECS or SWECS structure, the applicant is required to contact the County and its designated representatives to schedule a pre-application meeting. The purpose of this meeting is to address potential issues, which will help expedite the review and permitting process. The pre-application meeting shall include a site visit, if there has not been a prior site visit for the proposed site. It shall also be determined at the pre-application meeting, the number of copies necessary for the applicant to submit a completed application. The applicant shall pay any and all costs that are associated with the preparation and attendance of the pre-application meeting.

## **SECTION 1812 – Zoning Application Requirements**

All applications for Mini WECS, SWECS, or Wind Energy Conversion Systems, or any modification of such facility, shall comply with the requirements set forth in this Section. Applications not meeting the requirements stated herein or which are otherwise incomplete, may be rejected by the County. The applicant shall be required to perform the following actions:

- ◆ Sign the application with knowledge of the contents and representations made therein and attesting to the truth and completeness of the information. Any individual signing the application shall be an authorized individual of the applicant. The landowner, if different than the applicant, shall also sign the application.
- ◆ Submit the following statement in writing:
  - "The proposed Mini WECS, SWECS, or Wind Energy Conversion System shall be maintained in a safe manner, and in compliance with all conditions of the Permit, without exception, unless specifically granted relief by the County in writing, as well as all applicable and permissible local codes, ordinances, and regulations, including any and all applicable County, State and Federal Laws, rules, and regulations."

All applications for the construction or installation of new Mini WECS, SWECS, or Wind Energy Conversion Systems shall contain the information set forth in this Section. Where a certification is required, such certification shall bear the signature and seal of a *professional engineer*. At the discretion of the County, any false or misleading statement in the application may subject the applicant to denial of the application without further consideration or opportunity for correction.

Applicants must submit all of the information required to obtain a Major Plot Plan Zoning Permit, as referenced in Article 17, Section 1720 of the Dearborn County Zoning Ordinance, to the Dearborn County Plan Commission. In addition to the information required to obtain a Zoning Permit, the applicant shall provide all of the information that is necessary to obtain a Conditional Use Permit from the Dearborn County Board of Zoning Appeals, if applicable.

Information that is also relevant to the following items must also be specifically supplied:

1. The location of all above-ground utility lines within a radius equal to two (2) times the height of the proposed Mini WECS, SWECS, or WECS;
2. The location of all underground utility lines associated with the project site;
3. Dimensional representation of the structural components of the tower construction including the base and footings;
4. Manufacturer's specifications and installation and operation instructions or specific Mini WECS, SWECS, or WECS design information;
5. Certification by a registered professional engineer that the tower design, including all footers, is sufficient to meet all County, State, and Federal requirements;
6. Information relevant to any existing, or anticipated, access easements or utility easements;
7. Acknowledgement that no appurtenances other than those associated with the wind turbine operations may be connected to any wind tower except with express, written permission by the BZA;
8. A transportation plan showing how vehicles would access the site and describing the impacts of the proposed energy project on the local and regional road system during construction and operation;
9. A re-vegetation plan that restores areas temporarily disturbed during construction;

10. For all Mini WECS, SWECS, or WECS sites involving one (1) acre or more of land disturbance, a drainage and erosion control plan must also be developed in consultation with the Dearborn County Soil and Water Conservation District.

#### **SECTION 1814 - Location of Wind Energy Conversion Systems**

An application for a Mini WECS, SWECS, or Wind Energy Conversion System may be approved in any zoning district of Dearborn County, provided that County officials find that the proposed site does not interfere with the health, safety and welfare of the County and its inhabitants and will not have a harmful effect on the nature and character of the community and neighborhood.

Notwithstanding that a potential application may require approval for a Conditional Use, the County may disapprove an application for any of the following reasons:

1. Conflict with safety and safety-related codes and requirements;
2. Conflict with the historic nature or character of a neighborhood or historical district;
3. Conflict with a purpose of an existing, specific zoning or land use designation;
4. The placement and location of Wind Energy Conversion System which would create an unacceptable risk, or the reasonable probability of such, to residents, the public, employees and agents of the County, or employees of the service provider or other service providers;
5. Conflicts with the provisions of this ordinance.

#### **SECTION 1816 - Structure Design and Construction**

The design and construction of all Mini WECS, SWECS, or Wind Energy Conversion Systems shall meet the following standards:

1. The foundation and attachments shall meet all local, County, State and Federal structural requirements for loads, including wind and ice loads;
2. All utilities at a Mini WECS, SWECS, or Wind Energy Conversion Systems site shall be installed underground and in compliance with all laws, ordinances, rules and regulations of the County;
3. Mini WECS, SWECS, Wind Energy Conversion Systems, and any and all accessory or associated facilities shall maximize the use of building materials, colors and textures designed to blend with the structure to which it may be affixed and/or to harmonize with the natural surroundings;
4. At SWECS or Wind Energy Conversion System project sites, an acceptable access and turn-around area shall be provided to assure adequate emergency and service access. Maximum use of existing roads, whether public or private, shall be made to the extent practicable. Road construction shall at all times minimize ground disturbance and the cutting of vegetation. Road grades shall closely follow natural contours to assure minimal visual disturbance and reduce soil erosion.

## **SECTION 1818 - Height and Clearances of Wind Energy Conversion Systems**

Mini WECS must have a system height of less than forty-five (45) feet.

No Wind Energy Conversion System Tower constructed after the effective date of this Ordinance, including allowing for all attachments, shall exceed that height which shall permit operation without required artificial lighting of any kind in accordance with municipal, County, State, and/or any Federal statute, law, ordinance, code, rule or regulation.

The minimum distance between the ground and any protruding blade(s) utilized on a Mini WECS, SWECS, or WECS shall be fifteen (15) feet, as measured at the lowest point of the arc of the blades. This minimum distance shall be increased as necessary to provide for vehicle clearance in locations where over-sized vehicles might travel.

## **SECTION 1820 - Appearance and Visibility of all Wind Energy Conversion Systems**

All Mini WECS, SWECS, or Wind Energy Conversion Systems and their appurtenant structures shall be designed to minimize the adverse visual impacts of its surroundings. Specifically:

1. Mini WECS, SWECS, or Wind Energy Conversion Systems shall not be artificially lighted or marked, except as required by law.
2. All Mini WECS, SWECS, WECS and supporting structures must consist of a non-reflective, unobtrusive color—usually gray or white. No advertising signage shall be permitted; however, the manufacturer's identification with ratings is allowed.
3. If lighting is required, the Applicant shall provide a detailed plan for sufficient lighting of as unobtrusive and inoffensive an effect as is permissible under State and Federal regulations.

## **SECTION 1822 - Security of Wind Energy Conversion Systems**

All Mini WECS, SWECS, and Wind Energy Conversion Systems and their appurtenant structures shall be located, fenced or otherwise secured in a manner that prevents unauthorized access. Specifically, all Mini WECS, SWECS, and WECS and other supporting structures, including guy wires, shall be made inaccessible to individuals and constructed or shielded in such a manner that they cannot be climbed or collided with.

## **SECTION 1824 - Signage**

All Wind Energy Conversion Systems and their appurtenant structures shall contain a sign no larger than four (4) square feet in order to provide the name(s) of the owner(s) and operator(s) of the WECS as well as emergency phone number(s). This sign shall be visible from the access point of the site and shall not be lighted, unless lighting is required by applicable law, rule or regulation. A four (4) square-foot warning sign concerning voltage must also be placed at the base of all pad-mounted transformers and substations in a conspicuous location. No other signage, including advertising, shall be permitted.

## **SECTION 1826 - Lot Size and Setbacks**

All proposed Mini WECS, SWECS, or Wind Energy Conversion Systems shall be set back from abutting parcels, recorded rights-of-way and existing or anticipated access or utility easements by the greater of the following distances: A distance equal to the height of the proposed Mini WECS, SWECS, or WECS structure plus ten percent (10%) of the height of the supporting structure, or the existing setback requirement of the underlying zoning district, whichever is greater. Any accessory structure shall be located so as to comply with the applicable minimum setback requirements for the property on which it is situated. Structures that are not being used in conjunction with the Mini WECS, SWECS, or Wind Energy Conversion Systems, with the exception of accessory structures, shall not be located within the free fall area unless otherwise approved by the Board of Zoning Appeals.

A transfer of ownership of an adjacent lot, held in combination and under common ownership at the time of Mini WECS, SWECS, or WECS installation, shall include a grant of easement equal to the required off-site setback encroachment; approved by the Planning Director; and recorded with the Dearborn County Recorder's Office to run with the deed.

## **Section 1832 – Maintenance & Inspections**

The owner or operator of a WECS must submit, on an annual basis, a summary of the operation and maintenance reports to the County. In addition to the above annual summary, the owner or operator must furnish such operation and maintenance reports as the County reasonably requests. Any physical modification to the WECS that alters the mechanical load, mechanical load path, or major electrical components shall require re-certification by a professional Engineer licensed in the State of Indiana and it shall be necessary to apply for both a Zoning Permit and a Building Permit.

The Dearborn County Planning Director and Building Commissioner will be responsible for contacting all owners or operators of a WECS that does not meet local, State, or Federal codes and regulations. Once notified in writing, the owner or operator of a WECS will be required to address any repairs or alterations within thirty (30) days after receiving notice—or within a longer period of time mutually acceptable to both parties. During this time period, the owner or operator of a WECS may retain a licensed 3rd party professional engineer familiar with WECS systems to prepare and submit to the appropriate Dearborn County officials a written report which addresses the repairs or alterations required, and which suggests alternate methods for addressing the concerns or provides evidence that said repairs or alterations are unnecessary. The Dearborn County Planning Director and Building Commissioner 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.

### **Section 1834 - Liability Insurance**

The owner or operator of any WECS will provide proof of liability coverage; shall maintain a current general liability policy covering bodily injury and property damage; and may be required to name Dearborn County as an additional insured with dollar amount limits per occurrence, in the aggregate, and a deductible, which is suitable and in a form acceptable to the Dearborn County Plan Commission Attorney.

### **Section 1836 - Indemnification**

Any application for Wind Energy Conversion Systems that is proposed for County property, pursuant to this Ordinance, shall contain a provision with respect to indemnification. Such provision shall require the applicant, to the extent permitted by the Law, to at all times defend, indemnify, protect, save, hold harmless, and exempt the County, and its officers, boards, employees, committee members, attorneys, agents, and consultants from any and all penalties, damages, costs, or charges arising out of any and all claims, suits, demands, causes of action, or award of damages, whether compensatory or punitive, or expenses arising therefrom, either at law or in equity, which might arise out of, or are caused by, the placement, construction, erection, modification, location, products performance, use, operation, maintenance, repair, installation, replacement, removal, or restoration of said WECS, excepting, however, any portion of such claims, suits, demands, causes of action or award of damages as may be attributable to the negligent or intentional acts or omissions of the County, or its servants or agents. With respect to the penalties, damages or charges referenced herein, reasonable attorneys' fees, consultants' fees, and expert witness fees are included in those costs that are recoverable by the County. An indemnification provision will not be required in those instances where the County itself applies for and secures a permit for WECS.

### **Section 1838 - Removal of Wind Energy Conversion Systems**

The holder of a permit for a Mini WECS, SWECS, or Wind Energy Conversion System, or its successors or assigns, shall dismantle and remove such facilities, and all associated structures, from the site and restore the site to as close to its original condition as is possible, if at any time any of the following apply:

1. The system has been abandoned for a period of one hundred-eighty (180) days in any three hundred-sixty five (365) day period. For properties involving foreclosure, vacant residential structures, or for other unusual or extreme circumstances, a waiver may be requested to extend this time period. All waiver requests of this specific type must be submitted in writing to the Planning Director and may be issued only if the waiver is determined to be necessary and if the requested waiver does not adversely affect the other requirements of this Article;
2. The system falls into such a state of disrepair that it creates a health or safety hazard;
3. The system has been located, constructed, or modified without first obtaining, or in a manner not authorized by, the required permit, or any other necessary authorization;

4. The Board of Zoning Appeals determines that the health, safety, and welfare interests of the County warrant and require the removal of the Mini WECS, SWECS, or Wind Energy Conversion System.

#### **Section 1840 - Avoidance and Mitigation of Damages to Public Infrastructure**

Applicants of all Wind Energy Conversion Systems shall identify all roads to be used for the purpose of transporting system materials, parts, and / or equipment for the construction, operation, or maintenance of the WECS and shall:

1. Conduct a pre-construction baseline survey in coordination with the impacted transportation authorities to determine existing road conditions. The survey shall include photographs and a written agreement to document the condition of the public facility as the WECS is being constructed;
2. Obtain any applicable weight and size permits from all impacted transportation authorities prior to construction;
3. Prepare a written statement that acknowledges that the Applicant will be responsible for addressing on-going road maintenance, drainage, erosion control, or dust issues identified by the Dearborn County Engineer, the Indiana Department of Transportation (INDOT), the Indiana Department of Environmental Management (IDEM), or another applicable public agent during all phases of the construction process. All such issues must be addressed in the prescribed time(s) and manner(s) set forth by the applicable governmental entity.

#### **Section 1842 - Variances**

Any requirement of this Article may receive a variance by the Board of Zoning Appeals if it is determined that such action is warranted given the nature of an individual project and such action will serve to preserve the purpose and intent of these regulations.