# TOWNSHIP OF LEXINGTON SANILAC COUNTY, MICHIGAN ORDINANCE # 14-02

AN ORDINANCE TO AMEND THE TEXT OF THE LEXINGTON TOWNSHIP ZONING ORDINANCE TO AMEND REQUIREMENTS GOVERNING WIND ENERGY CONSERVATION SYSTEMS AND METEOROLOGICAL TOWERS, TO PROVIDE ADDITIONAL REQUIREMENTS RELATING THERETO, AND TO DEFINE TERMS RELATING TO THE SAME

## THE TOWNSHIP OF LEXINGTON ORDAINS:

# **ARTICLE 1**:

CHAPTER 3, General Provisions, Section 3.47.0, is hereby amended as attached.

# **ARTICLE 2**:

CHAPTER 3, General Provisions, Section 3.47.2, entitled "Commercial Wind Energy Conversion Systems," is hereby amended as attached.

# ARTICLE 3:

CHAPTER 6, Agricultural Enterprise District (A-1), Section 6.3.0, entitled "Agricultural (A-1) District Special Land Uses" is hereby amended as attached.

# **ARTICLE 4**:

CHAPTER 14, Special Land Uses, Section 14.7.0, entitled "Agricultural (A-1) District Special Land Uses" is hereby amended as attached.

# **ARTICLE 5**:

CHAPTER 7, Agricultural/Residential District (A-2), Section 7.3.0, entitled "Agricultural/Residential (A-2) District Special Land Uses" is hereby amended as attached

# **ARTICLE 6:**

CHAPTER 14, Special Land Uses, Section 14.8.0, entitled "Agricultural/Residential (A-2) District Special Land Uses" is hereby amended as attached.

## <u>ARTICLE 7 SEVERABILITY CLAUSE:</u>

The various parts of this ordinance shall be deemed severable. Should any section, paragraph, or provision hereof be held by the courts to be unconstitutional or invalid, such holding shall not affect the validity of this Ordinance as a whole or any part thereof, other than the part held to be unconstitutional or invalid.

# **ARTICLE 8 REPEAL:**

All ordinances and parts of ordinances in conflict with the provisions of this ordinance are repealed to the extent of such conflict, to the extent that this ordinance conflicts with any other ordinance this ordinance shall control (supersede).

# **ARTICLE 9 EFFECTIVE DATE:**

Public hearing having been held hereon, the provisions of this Ordinance shall take effect upon the expiration of seven days after publication, pursuant to the provision of Section 401 (6), Act 110 of the Public Acts of 2006, as amended.

# **ARTICLE 10 ADOPTION:**

Made and passed by the Township Board of Lexington Township, Sanilac County, Michigan, on this 23 day of October, 2014, A.D.

Date of Public Hearing(s): March 19, 2014, and July 16, 2014 Date of Adoption by Township Board: October 23, 2014

Date of Publication: November 7, 2014

Date and Time Ordinance Shall Take Effect: November 14, 2014; at 12 noon.

## Certification

I, Katherine Calamita, Clerk of the Township of Lexington, do hereby certify that Ordinance No. 14-02 was adopted by the Township Board at a regular meeting of the Township Board held at the Township Hall on the 23 day of October, 2014.

Vote on this Ordinance, 4 members being present, was as follows:

AYES: WATSON JAHN PARTAKA MCALLISTER

NAYS: NONE

I further certify that said Ordinance No. 14-02 adopted by the Township Board on the 23 day of October, 2014 was published once in The Jeffersonian, a newspaper published and circulated in the Township of Lexington, County of Sanilac, on the 7 day of November, 2014, this being the first and final day of publication of this ordinance.

Katherine Calamita, Clerk Township of Lexington

# Section 3.47.0 — Wind Energy Conversion Systems and Meteorological Towers Definitions

The following definitions and standards shall apply to all Wind Energy Conversion Systems (hereinafter referred to as WECS), Commercial Wind Energy Conversion Systems (hereinafter referred to as CWECS), Wind Energy Conversion Facilities (hereinafter referred to as WECF), Meteorological Towers (hereinafter referred to as MET),.

#### .01 DEFINITIONS

#### A. Ambient:

Ambient is defined as the sound pressure level exceeded 90% of the time or L90.

#### B. ANSI:

American National Standards Institute

## C. Authorized Factory Representative:

Any individual with technical training of a WECS, CWECS and/or WECF who has received factory installation instructions and is certified in writing by the manufacturer of the WECS, CWECS and/or WECF.

## D. Commercial Wind Energy Conversion System:

CWECS shall mean any WECS that is designed and built to provide electricity to the electric utility's power grid.

## E. dB(A):

The sound pressure level in decibels. Refers to the "a" weighted scale defined by ANSI. A method for weighting the frequency spectrum to mimic the human ear.

## F. Decibel:

The unit of measure used to express the magnitude of sound pressure and sound intensity.

## G. Decommissioning:

Within six (6) months of the happening of the following events, the owner/operator of a WECS, CWECS and/or WECF shall deconstruct and remove the WECS, CWECS and/or WECF and concrete base to four feet below grade level and restore the property to the condition it was in immediately prior to construction:

The WECS, CWECS and/or WECF has been unused for a period of twelve (12)
consecutive months. The owner/operator of a WECS, CWECS and/or WECF shall
notify the Township Clerk in writing when any period of non-use commences and
if and when it terminates;

- 2. The permit issued by the Township for any WECS, CWECS and/or WECF is revoked;
- 3. The owner/operator of the WECS, CWECS and/or WECF is ordered to cease operations for a period of time in excess of twelve (12) consecutive months by any agency or authority having jurisdiction to do so.

## H. FAA:

The Federal Aviation Administration.

## I. Facility Abandonment:

A WECS, CWECS and/or WECF out of production for a period of time not less than one (1) year.

#### J. Habitable Structure:

Any structure usable for living or business purposes, which includes, but is not limited to working, sleeping, eating, cooking, recreation, office, office storage, or any combination thereof. An area used only for storage incidental to a residential use, is not included in this definition.

#### K. Hub Height:

When referring to a WECS, CWECS and/or WECF the distance measured from ground level to the center of the turbine hub. Hub height is defined as the height from the Ground Level (GL) at which the hub of the windmill or the hub of the propeller blades of the wind energy generator is situated.

## L. IEC:

International Electro Technical Commission. The IEC is the leading global organization that prepares and publishes international standards for all electrical, electronic and related technologies.

## M. ISO:

International Organization for Standardization. ISO is a network of the national standards institutes of 156 countries.

#### N. Manual and Automatic Controls:

Manual and Automatic Controls give protection to power grids and limit rotation of WECS, CWECS blades to below the designed limits of the conversion system.

#### O. Met Tower:

A meteorological tower used for the measurement of wind speed.

## P. Non-Participating Parcel:

A parcel of real estate that is not under lease, license or other property agreement with the owner/operator of a CWECS, WECF or MET. For purposes of establishing setback requirements under this ordinance a non-participating includes a parcel that is not under lease license or other property agreement with the owner/operator of a CWECS, WECF or MET for the full duration of any such agreement in effect on an adjoining parcel on which a CWECS, WECF or MET is constructed.

## Q. Occupied Structure:

A structure including, but not limited to, a home, office, church, school, hospital or place of business intended for human occupation and not unoccupied on a permanent basis on the date a permit for a CWECS, WECF or MET is issued. This definition shall not include agricultural buildings and shall not include manufacturing or other places of business where the noise limits established in this ordinance are regularly exceeded by the normal operations of those places excluding sound generated by a CWECS, WECF or MET.

## R. On Site Wind Energy Systems:

This system is intended to primarily serve the needs of the consumer, and is considered an accessory building.

## S. Participating Parcel:

A parcel of real estate which is under lease, license or other agreement with the owner or operator of a WECS, CWECS, WECF or MET. A participating parcel may consist of parcels owned by different owners.

## T. Private/Agricultural Wind Energy Conversion System:

- Private WECS shall mean any WECS that is an accessory to a
  principal non-farm, non-agricultural use located on the same lot, and is designed
  and built to serve the needs of the principal use which is intended to primarily
  reduce on-site consumption of utility power. The maximum height of a Private
  WECS is eighty (80) feet.
- 2. Agricultural WECS shall mean any WECS that is an accessory to a permitted farm or agricultural operation, and is designed and built to serve the needs of the farm or agricultural operation.

## U. Professional Engineer:

Any licensed engineer registered in the State of Michigan.

#### V. Shadow Flicker:

Alternating changes in light intensity caused by the moving blade of a wind energy system casting shadows on the ground and stationary objects, such as a window in a dwelling.

#### W. Sound Pressure:

Average rate at which sound energy is transmitted through a unit area is a specified direction. The pressure of the sound measured at a receiver.

#### X. Sound Pressure Level:

The sound pressure mapped to a logarithmic scale and reported in decibels (dBA).

## Y. Survival Wind Speed:

The maximum wind speed a WECS and/or CWECS in automatic, unattended operation (not necessarily producing power) can sustain without damage to structural components or loss of the ability to function normally.

## Z. Tower Height:

When referring to a WECS and/or CWECS, the distance measured from the furthest vertical extension of the rotor to the ground.

#### AA. Utility Scale:

All wind farms that produce greater than fifty (50) kilowatts of energy.

## BB. Wind Energy Conversion Systems (hereinafter referred to as WECS):

Any device such as a wind charger, windmill, or wind turbine, tower and air pumper mills that convert wind energy to a form of usable energy.

## CC. Wind Energy Conversion Facility, (WECF), or Wind Energy Facility:

An electricity generating facility consisting of one or more wind turbines under common ownership or operation control, and includes substations, MET Towers, cables/wires, and other buildings accessory to such facility, whose main purpose is to supply electricity to off-site customers.

## DD. Wind Energy Facility Site Permit:

A permit issued upon compliance with the standards enunciated in this Section.

## EE. Wind Site Assessment:

An assessment to determine the wind speeds at a specific site and the feasibility of using that site for construction of a wind energy system.

## FF. Wind Rotor:

The blades plus hub to which the blades are attached used to capture wind for purposes of energy conservation.

# 3.47.2 — Commercial Wind Energy Conversion Systems

## .01 DEFINITIONS

See definitions listed in Section 3.47.0.01.

#### .02 APPROVAL REQUIRED

Except where noted in this Section, it shall be unlawful to construct, erect, install, alter, or locate any CWECS project within Lexington Township unless a special land use permit has been obtained pursuant to this Ordinance.

Procedure: The Planning Commission review of a Special Land Use Permit application for a CWECS or WECF is a two-step process. The first step is the public hearing and decision by the Planning Commission, per the procedures for review in Chapter 14. The second step, which may occur at a separate meeting for a utility scale wind energy system, is the site plan review process by the Planning Commission as described in Chapter 15. A decision on the Special Land Use Permit application by the Planning Commission is inclusive of all proposed wind turbine components, underground electrical lines, sub-station(s), underground electrical lines, junction boxes, laydown yard(s), concrete batch plant(s), and any operations/maintenance building(s).

Application for special use permit required by this Section shall be made on forms provided by Lexington Township and shall contain the following, in addition to the requirements of Section 14.1.0, Special Land Use:

- A. Company contact information (telephone numbers and e-mail addresses), including name and address of company, name of project, key company contacts with titles, EIN (Employer Identification Number).
- B. A narrative describing the proposed UGWES, CWECS and/or WECF, including an overview of the project.
- C. Site plan (GIS shape file overlay, electronic file and paper copy) of the property showing:
  - 1. the project area boundaries
  - 2. location, height, and dimensions of all existing and proposed structures and fencing

- 3. location, grades, and dimensions of all temporary and permanent on-site and access roads from the nearest county or state maintained road
- 4. existing topography,
- 5. water bodies, waterways, wetlands, and drainage channels, and
- 6. all new infrastructure above ground related to the project.
- D. Details or drawings shall show features in the design of a typical tower and its base, that upon removal of said tower will allow restoration of the soil at the site to a depth of four (4') feet.

## E. Certifications:

Certification that applicant has complied or will comply with all applicable state and federal laws and regulations. Copies of all such permits and approvals that have been obtained or applied for at time of the application. Note: Land enrolled in Michigan Farmland Preservation Program through Part 361 of the Natural Resources and Environmental Protection Act, 1994 Act 451 as amended, more commonly known as PA 116, must receive approval from the Michigan Department of Agriculture to locate a WECS on the property prior to construction.

- F. Environmental Impact Analysis Report
- G. Avian and Wildlife Impact Analysis Report
- H. Sound Pressure Level Analysis and Report
- I. Electromagnetic Interference Report
- J. Shadow Flicker Analysis Report
- K. Proof of the applicant's public liability insurance
- L. Manufacturers' Material Safety Data Sheet(s): Documentation shall include the type and quantity of all materials used in the operation of all equipment including, but not limited to, all lubricants and coolants.
- M. Decommissioning:

Copy of the decommissioning plans and a description of how any surety bond, if required, is applied to the decommissioning process.

- N. Complaint Resolution:
  - Description of the complaint resolution process.
- O. Fire Suppression Plan
- P. Anticipated construction date and anticipated completion date.
- Q. The lessor must acknowledge the fact in writing that the decommissioning process poses some risk of the concrete bases remaining in place, if the responsible party (lessee) was unable to properly remove the bases as required in this ordinance. This acknowledgment is to be submitted with the application package and can be in the form of the actual lease language that has been signed by the lessor or an "Acknowledgement Letter" that documents this understanding and has been signed by the lessor.
- R. A permit fee for each CWECS and/or WECF as set by the Lexington Township Board must accompany the application.

## .03 GENERAL STANDARDS

The following standards shall apply to all CWECS and/or WECF in Lexington Township.

## **A.** Annual Inspection:

- 1. Every CWECS and or WECF project must be inspected annually by an Authorized Factory Representative or Professional Engineer to certify that it is in good working condition and not a hazard to the public. Such records shall be submitted to Lexington Township and considered a part of a continuing special land use permit. The credentials of the entity performing the inspection must be submitted with said inspection including the inspector's name, address, telephone number and email address.
- Per the provisions of the Special Land Use Permit (Section 14.4.0.03 E), the zoning
  administrator or his designee may complete periodic inspections of the CWECS or
  WECF. Such inspection shall be recorded on a Lexington Township form and all costs
  associated with the inspection shall be borne by the CWECS and or WECF project
  owner and invoiced annually.
- B. Avian and Wildlife Impact:

The applicant shall have a third party, approved by the Township or their engineer, qualified professional conduct an analysis to identify and assess any potential impacts on wildlife and endangered species The applicant shall take appropriate measures to minimize, eliminate or mitigate adverse impacts identified in the analysis. The applicant

shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.

- Sites requiring special scrutiny include wildlife refuges, other areas where birds are
  highly concentrated, bat hibernacula, wooded ridge tops that attract wildlife, sites
  that are frequented by federally and/or state listed endangered species of birds and
  bats, significant bird migration pathways, and areas that have landscape features
  known to attract large numbers of raptors.
- 2. At a minimum, the analysis shall include a thorough review of existing information regarding species and potential habitats in the vicinity of the project area. Where appropriate, surveys for bats, raptors, and general avian use should be conducted. The analysis shall include the potential effects on species listed under the federal Endangered Species Act and Michigan's Endangered Species Protection Law.
- 3. The analysis shall indicate whether a post construction wildlife mortality study will be conducted and, if not, the reasons why such a study does not need to be conducted.
- 4. Power lines should be placed underground, when feasible, to prevent avian collisions and electrocutions. All above-ground lines, transformers, or conductors should follow any Avian Power Line Interaction Committee (APLIC, http://www.aplic.org/) guidelines to prevent avian mortality.

#### C. Visual Impact:

CWECS or WECF projects shall use tubular towers and all CWECS or WECF in a project shall be finished in a single, non-reflective matte finished color. A project shall be constructed using wind energy systems of similar design, size, operation, and appearance throughout the project. No lettering, company insignia, advertising or graphics shall be on any parts of the tower, hub, or blades. Nacelles may have lettering that exhibits the manufacturer's and/or owner's identification. The applicant shall avoid state or federal scenic areas and significant visual resources listed in the local unit of government's comprehensive plan. There shall be no illumination other than that required of the FAA.

## D. Environmental Impact:

 The applicant shall have a third party, approved by the Township or their engineer, qualified professional conduct an analysis to identify and assess any potential impacts on the natural environment including, but not limited to wetlands and other fragile ecosystems, historical and cultural sites, and antiquities. The applicant shall take appropriate measures to minimize, eliminate or mitigate adverse impacts identified in the analysis. 2. The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts. The applicant shall comply with applicable parts of the Michigan Natural Resources and Environmental Protection Act (Act 451 of 1994, MCL 324.101 et seq.) including but not limited to Part 31 Water Resources Protection (MCL 324.3101 et seq.), Part 91 Soil Erosion and Sedimentation Control (MCL 324.9101 et seq.), Part 301 Inland Lakes and Streams (MCL 324.30101 et seq.), Part 303 Wetlands (MCL 324.30301 et seq.), Part 323 Shoreland Protection and Management (MCL 324.32301 et seq.), Part 353 Sand Dunes Protection and Management (MCL 324.35301 et seq.), The applicant shall be responsible for making repairs to any public roads, drains and infrastructure damaged by the construction of the CWECS or WECF.

## E. Complaint Resolution:

The applicant shall develop a process to resolve complaints from nearby residents concerning the construction or operation of the project. The process may use an independent mediator or arbitrator and shall include a time limit for acting on a complaint. The process shall not preclude the local government from acting on a complaint. During construction the applicant shall maintain and make available to nearby residents a telephone number where a project representative can be reached during normal business hours. A report of all complaints and resolutions to complaints shall be filed with the township on an annual basis.

## F. Compliance with FAA:

It shall be the responsibility of the person in charge of the CWECS project to complete the proper FAA applications and obtain the proper permits for the CWECS project. It shall also be the responsibility of the person in charge of the CWECS project to obtain a determination of no significant impact to air navigation from the FAA.

## G. Construction Codes, Towers, and Interconnection Standards:

CWECS or WECF including towers shall comply with all applicable state construction and electrical codes and local building permit requirements. CWECS or WECF including towers shall comply with Federal Aviation Administration requirements, the Michigan Airport Zoning Act (Public Act 23 of 1950, MCL 259.431 et seq.), the Michigan Tall Structures Act (Public Act 259 of 1959, MCL 259.481 et seq.), and local jurisdiction airport overlay zone regulations. CWECS or WECF shall comply with applicable utility, Michigan Public Service Commission, and Federal Energy Regulatory Commission interconnection standards.

#### H. Lighting:

The minimum FAA lighting standards shall not be exceeded. All tower lighting required by the FAA shall be shielded to the extent possible to reduce glare and visibility from the ground. The tower shaft shall not be illuminated unless required by the FAA.

- Compliance with Township Ordinances:
   All CWECS projects shall be in compliance with all Lexington Township Zoning Ordinance requirements and other applicable ordinances.
- J. Decommissioning Plan and Escrow:
  - The CWECS and/or WECF project must contain a Decommissioning Plan to ensure it is properly decommissioned upon the end of the project life or facility abandonment.
  - 2. Decommissioning shall include: Removal of all structures (including transmission equipment and fencing) and debris to a depth of four (4) feet, restoration of the soil, and restoration of vegetation within six (6) months of the end of project life or facility abandonment.
  - 3. The Decommissioning Plan shall state how the facility will be decommissioned, the Professional Engineer's estimated cost of decommissioning, the financial resources to be used to accomplish decommissioning, and the escrow agent with which the resources shall be deposited.
  - 4. The Decommissioning Plan shall also include an agreement between the applicant and the Township as part of the Special Land Use Application and prior to the beginning of construction that:
    - a. The applicant shall post a performance bond or equivalent financial instrument for decommissioning. The bond shall be in favor of Lexington Township and shall be in an amount of at least one hundred fifty thousand dollars (\$150,000.00) per turbine and shall contain a replenishment obligation. Evidence of decommissioning bond shall be in the form of an escrow account, surety bond, letter of credit subject to approval of the Lexington Township Planning Commission to guaranty decommissioning of an abandoned site. If surety bond is utilized, it must be pursuant to US Treasury bond list.
    - b. The Township shall have access to the escrow account funds, performance bond and/or equivalent financial instrument for the expressed purpose of completing decommissioning if decommissioning is not completed by the applicant within six (6) months of the end of the project life or facility abandonment as defined.

- c. The Township is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning.
- d. The Township is granted the right to seek injunctive relief to effect or complete decommissioning, as well as the Township's right to seek reimbursement from the applicant or applicant successor for decommissioning costs in excess of the amount deposited in escrow, performance bond and/or equivalent financial instrument and to file a lien against any real estate owned by the applicant or applicant's successor, or in which they have an interest, for the amount of the excess, and to take all steps allowed by law to enforce said lien.
- e. The applicant agrees to all the terms of this Ordinance.

## K. Safety:

The safety of the design of all CWECS towers and/or WECF shall be certified by a Professional Engineer registered in the State of Michigan. The standard for certification shall be included with the permit application.

All Utility Grid wind energy systems shall be designed to prevent unauthorized access to electrical and mechanical components and shall have access doors that are kept securely locked at all times when service personnel are not present. All spent lubricants and cooling fluids shall be properly and safely removed in a timely manner from the site of the wind energy system. A sign shall be posted near the tower or Operations and Maintenance Office building that will contain emergency contact information. Signage placed at the road access shall be used to warn visitors about the potential danger of falling ice. The minimum vertical blade tip clearance from grade shall be 20 feet for a wind energy system employing a horizontal axis rotor.

## L. Distribution / Transmission Lines:

- 1. Underground and/or overhead collection lines or collection line systems are required to obtain a separate special land use permit from the Township.
- 2. Distribution and/or Transmission lines shall be installed underground whenever practicable and at a depth of no less than eight (8) feet.
- 3. GPS mapping shall be submitted to the township showing location and depth of all underground distribution and/or transmission lines.
- 4. Surface markers shall be placed to indicate the location of the underground lines and a map will be placed on the tower indicating the same.

5. Membership and participation in the MISS DIG Systems Inc of Michigan shall be required. Proof of membership shall be provided upon request.

#### M. Fees:

An applicant for a CWECS and/or WECF developer, owner and/or operator shall remit an application fee and a fee per megawatt of nameplate capacity to the Township included with all applications in the amount specified in the annual fee schedule which shall be set by resolution of the Lexington Township Board. This fee is based on the cost to the Township of the review. The fee may be adjusted from time to time, and shall include, but not be limited to, such costs as meeting expenses, publication and notification expenses, related legal, planning, engineering and other consultant fees, and other costs as may be incurred by the Township during the application and review process. The applicant or developer shall also pay any documented expenses or costs related to the project that are incurred by the Township throughout the life of the CWECS and/or WECF including but not limited to attorney fees, meeting costs, and emergency services to be billed within 60 days of occurrence. Said fees shall be paid within 60 days of the Township billing for such fees.

## N. Fire Risk:

All CWECS and/or WECF projects must remove fuel sources, such as vegetation, from the immediate vicinity of electrical gear and connections.

## O. Height:

CWECS projects shall be exempt from the height requirements of the Ordinance, subject to the provisions of Special Land Uses, Article 14.1.0, and compliance with FAA regulations.

## P. Installation Certification:

The Professional Engineer shall certify that the construction and installation of the CWECS and/or WECF project meets or exceeds the manufacturer's construction and installation standards.

## Q. Electromagnetic Interference:

No CWECS or WECF shall be installed in any location where its proximity to existing fixed broadcast, retransmission, or reception antennae for global positioning system correction systems (RTK), radio, television, or wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception unless the applicant provides a replacement signal to the affected party that will restore reception to at least the level present before operation of the wind energy system. No CWECS of WECF shall be installed in any location within the line of sight of an existing microwave communications link where operation of the

wind energy system is likely to produce electromagnetic interference in the link's operation unless the interference is insignificant.

#### R. Noise Levels:

- Audible noise or the sound pressure level from the operation of the CWECS and/or WECF shall not exceed fifty (50) dBA, or the ambient sound pressure level plus five (5) dBA, whichever is greater for more than ten percent (10%) of any sixty (60) minute interval, measured at any residence, school, hospital, church or public building existing on the date of approval of any CWECS and/or WECF special use permit. The applicant shall be able to provide sound pressure level measurements from a reasonable number of sampled locations at the perimeter of the CWECS and/or WECF to demonstrate compliance with this standard.
- 2. In the event audible noise from the operation of the CWECS and/or WECF contains a steady pure tone, the standards for audible noise set forth in subparagraph 1) of this subsection shall be reduced by five (5) dBA.
  - a) a constant pure tone is defined to exist if the one-third (1/3) octave band sound pressure level in the band, including the tone, exceeds the arithmetic average of the sound pressure levels of the two (2) contiguous one-third (1/3) octave bands by five (5) dBA for center frequencies of the five hundred (500) Hz and above, by eight (8) dBA for center frequencies between one hundred sixty (160) Hz and four hundred (400) Hz, or by fifteen (15) dBA for center frequencies less than or equal to one hundred twenty-five (125) Hz.
- 3. Ambient noise levels shall be measured at the property lines of potentially affected existing residences, schools, hospitals, churches and public building.
  - a) Ambient noise level measurement techniques shall employ all practical means of reducing the effect of wind-generated noise at the microphone.
  - b) Ambient noise level measurements may be performed when wind velocities at the proposed project site are sufficient to allow wind turbine operations, provided that the wind velocity does not exceed thirty (30) mph at the ambient noise measurement location.
- 4. Any noise level falling between two (2) whole decibels shall be the lower of the two.
- 5. As part of the application and prior to installation, the applicant shall provide modeling and analysis that will confirm that the CWECS or WECF will not exceed the maximum permitted sound pressure levels. Modeling and analysis shall conform to IEC 61400 and ISO 9613. After installation of the CWECS or WECF sound pressure

level measurements shall he done by a third party, qualified professional according to the procedures in the most current version of ANSI S12.18. All sound pressure levels shall be measured with a sound meter that meets or exceeds the most current version of ANSI S1.4 specifications for a Type II sound meter.

Documentation of the sound pressure level measurements shall be provided to the local government within 90 days of the commercial operation of the project.

## S. Setbacks/Separation:

## 1. Non-Participating Property Lines:

All CWECS projects must be setback from property lines and above ground utility lines and above ground public transmission lines at a distance equal to or greater than 1.2 times the total height of the structure, measured from the base of the structure to the highest reach of the blade. No part of the wind system structure, including guy wire anchors, may extend within the required setbacks.

## 2. Participating Property Lines:

No setback is required from any adjacent participating property.

## 3. Habitable Structure:

Each CWECS and/or WECF shall be set back from the nearest habitable dwelling, school, hospital, church, public or municipal building, a distance no less than one thousand three hundred twenty (1,320) feet.

## 4. Public Roads:

Each wind turbine shall be set back from the nearest public road a distance no less than 1.2 times the total height of the structure determined at the nearest centerline for such public road.

## T. Wind Turbines and Access Roads:

Wind related facilities shall be located so as to minimize the disruption to agricultural activity and, therefore, the location of towers and access routes is encouraged along internal properly lines.

## U. Shadow Flicker:

The applicant shall conduct an analysis of potential shadow flicker created by each proposed wind turbine at all inhabitable structures with direct line-of-sight to a wind turbine. Such analysis shall be documented in a shadow flicker modeling report to be submitted as part of the Special Land Use Permit Application to the Planning Commission. The analysis shall identify the locations of shadow flicker created by each proposed wind turbine and the expected durations of the flicker at these locations from sunrise to sunset over the course of a year. Site plans shall depict a contour around each proposed wind turbine that represents the predicted thirty (30) hours per year

shadow flicker generated by the modeling software used in the report. The analysis shall identify all areas where shadow flicker may affect the occupants of the inhabitable structures and describe measures that shall be taken to eliminate or mitigate the problems. A shadow flicker mitigation plan shall also be submitted with the shadow flicker modeling report. Any shadow flicker complaint shall be addressed by the applicant and be mitigated.

## V. Substation:

Any substation shall be located at a distance of no less than one thousand three hundred twenty (1,320) feet from any residence, school, hospital, church or public building. A lesser setback may be approved if the intent of this Ordinance would be better served thereby. A lesser setback shall be considered only with written approval from the owner of the inhabited structure.

## W. Transfer of ownership:

Any transfer of ownership or operation or otherwise of a CWECS and/or WECF shall be reported in writing to Lexington Township within ten (10) days of said transfer by the transferor or transferee. Failure to so notify said township of ownership transfer shall result in the assessment of a fine as established by the Township board.

## X. Warnings:

A visible warning sign of "High Voltage" shall be required to be placed at the base of all CWECS and or WECF projects. The sign must have at a minimum, six-inch letters with ¾ inch stroke. Such signs shall be located a maximum of three hundred (300) feet apart and at all points of site ingress and egress.

#### Y. Waste:

All solid waste, whether generated from supplies, equipment parts, packaging, operation, or maintenance of the CWECS and/or WECF, including old parts and equipment, shall be removed from the site immediately and disposed of in an appropriate manner. All hazardous waste generated by the operation and maintenance of the CWECS and/or WECF, including, but not limited to, lubricating materials, shall be removed from the site immediately and disposed of in a manner consistent with all local, state, and federal rules and regulations and recorded on a waste disposal plan on a semi- annual basis submitted to the township office.

## Z. Conflicting Provisions

In the event of a conflict between any provision in this section and any other section of this Zoning Ordinance with regard to Utility-Scale Wind Energy Systems, the provisions of this section shall control.

.04 HOLD HARMLESS AND INDEMNIFICATION

To the extent allowed by law, an applicant for any permit required by this Ordinance shall agree to defend, pay on behalf of, indemnify, and hold harmless Lexington Township from claims, damages, administrative enforcement actions or civil fines or orders or other claims arising out of or associated with an application and/or applicant's activity under issuance of the land use/permit.

## .05 REVOCATION OF PERMIT

A permit issued pursuant to this Ordinance may be revoked upon violation of any provision of this Ordinance. If a violation is alleged, the Township shall send written notice of said violation to the owner/operator of the WECS, CWECS and or WECF at the address on file with the Township. Said notice shall set forth the nature of the violation and shall notify the owner/operator that it has thirty (30) days to correct the violation. If the violation is not corrected within the thirty (30) day time period, the revocation of the permit shall be placed on the agenda of a Township Planning Commission. The Township shall give the owner/operator at least seven (7) days written notice of the date time and place of said meeting. The owner/operator may attend and present such information as it deems appropriate regarding the revocation. The Township Planning Commission shall determine if a violation exists and shall determine a timetable for either correcting the violation or revoking the permit.

#### .06 ENFORCEMENT

A violation of this Ordinance is declared to be a public nuisance and the Township may enforce the same by injunction or other remedy including the right to correct the violation and recover the cost of making the necessary correction from the owner/operator. In the event the Township obtains a judgment against the owner/operator pursuant to this section, the Township shall be entitled to an award of all reasonable and necessary costs incurred including actual attorney fees.

#### .07 PENALTY

Violators of the provisions of this Ordinance shall be subject to a Grade 4 municipal civil infraction penalties for each and every day of non-compliance.

#### .08 SEVERABILITY

If any provision of this Ordinance is held invalid by a court of competent jurisdiction, the invalidity of such provision shall not affect the validity of any other provision.

#### .09 REPEALER

All ordinances and parts of Ordinances in conflict with the provisions of this ordinance are repealed to the extent of such conflict, to the extent that this Ordinance conflicts with any other Ordinance this Ordinance shall control (supersede).