

**ESSEX TOWNSHIP
CLINTON COUNTY, MICHIGAN
ORDINANCE NO. 16**

At a duly scheduled and noticed meeting of the Township Board of Essex Township, Clinton County, Michigan, held at the Maple Rapids Community Center on February 18, 2015, at 7:00 p.m., Township Board Member Carla Wardin moved to adopt the following Ordinance, which motion was seconded by Township Board Member Kathleen George:

**AN ORDINANCE TO REGULATE THE OPERATION OF WIND ENERGY
CONVERSION SYSTEMS.**

THE TOWNSHIP OF ESSEX ORDAINS:

Section 1. Title and Purpose. This Ordinance shall be known and cited as the Essex Township Wind Energy Conversion Systems Ordinance. The purpose of this ordinance is to protect the public health, safety and general welfare in the operation of Wind Energy Conversion Systems as defined hereunder. Essex Township recognizes that the operation of a Wind Energy Conversion System has the potential to significantly impact nearby persons and property, as well as the community at large and its environment. It is the purpose of this Ordinance to regulate the operation of Wind Energy Conversion Systems in a manner that does not unreasonably interfere with the enjoyment of surrounding land areas by persons owning, occupying or otherwise residing on such lands, and is compatible with the public health, safety and welfare of the Township.

Section 2. Definitions. For purposes of this Ordinance, the following terms shall have the indicated meanings:

- (a) **Wind Energy Conversion System (WECS):** Also commonly referred to as a wind generating tower, windmill or wind-powered generator. It shall mean a combination of:
1. The surface area (typically a blade, rotor, or similar device), either variable or fixed, for utilizing the wind for electrical or electrical generating powers; and
 2. A shaft, gearing, belt, or coupling utilized to convert the rotation of the surface area into a form suitable for driving a generator, alternator, or other electricity-producing device; and
 3. The generator, alternator, or other device to convert the mechanical energy of the surface area into electrical energy; and
 4. The tower, pylon, or other structure upon which any, all, or some combination of the above are mounted.

A WECS can also include other components not listed above but associated with the operation of a wind energy conversion system.

- (b) **Wind Farm:** Clusters of 2 or more WECS operated with the intent to sell or provide electricity for end use other than on the premises upon which the WECS are located.

Section 3. License Application and Approval Procedure and Standards: No person shall operate a WECS or wind farm within Essex Township without first duly obtaining a license from the Township Board under this Ordinance.

- (a) **Amount of Application Fee:** The Township Board shall adopt a fee schedule by resolution.
- (b) **Issuance or Rejection of the License:** The Township Board shall, by resolution, after the application has been fully reviewed and the contents thereof approved or disapproved, grant or deny the application for a license. The Township Board may require changes to be made in the application to conform to the requirements of this Ordinance before issuing a license. In the event the application is denied, a written explanation for the denial shall be given.
- (c) **Length of License:** A license issued pursuant to this Ordinance shall be for a five (5) year period, subject to annual review and revocation.
- (d) **Application information:** All applications for a WECS or wind farm license shall be accompanied by a detailed application providing all of the following information:
 - (1) Planned security measures to prevent unauthorized trespass and access and to warn of potential dangers.
 - (2) WECS Maintenance Programs: The applicant shall provide the Township a written description of the maintenance program to be used to maintain the WECS or wind farm, including removal when determined to be obsolete or abandoned. The description shall include maintenance schedules, the types of maintenance to be performed and removal procedures and schedules if the WECS or wind farm become obsolete or abandoned.
 - (3) Planned safety measures to prevent uncontrolled rotation or over speeding.
 - (4) Planned lighting protection measures.
 - (5) A report of the noise impact of the proposed WECS or wind farm shall be included with the application, specifically taking into consideration the noise immission and emission levels set forth in this Ordinance. It shall describe in detail and must demonstrate compliance with all ANSI/ISO standards for outdoor measurements and predictions. Where such standards include confidence limits or limitations of use, the report shall present them and provide an explanation of how they were addressed. Applicable Standards include: S12.9 "Quantities and Procedures for Description and Measurement of Environmental Sound," Part 4 "Noise Assessment and Prediction of Long-term Community Response," and ISO 9613-2 "Acoustics-Attenuation of sound during propagation outdoors, Part 2, "General

Method of Calculation." It shall be produced and certified by a qualified acoustical consultant with Full Member status with the Institute of Noise Control Engineering (INCE) and include:

- a. A description and map of the project's sound producing features, including the range of decibel levels expected (to be measured in dB(A) and dB(C)), and the basis for the expectation.
 - b. A description of the project's proposed sound control features shall be described in detail, including specific measures to minimize noise impacts to neighboring residents and occupants. Information about potential post construction mitigation options, such as operation in Noise Reduction Operating (NRO) modes shall be described. If there are no post construction mitigation methods available a statement to that effect shall be included along with reasons supporting that statement.
 - c. The report shall address the potential for any and all adverse impacts from wind turbine sound imissions on the community and its residents located within 1 mile from the boundary of the WECS or wind farm.
- (6) The name and address of the person and firm who prepared the application, the seal of the professional engineer licensed in the State of Michigan responsible for the accuracy of the application and the date on which the application was prepared.
 - (7) Any additional information, diagrams, schematics or plans to show that the standards for approval of a license are satisfied.
 - (8) Additional detail(s) and information as requested by the Township Board.
- (e) **Standards:** Any WECS or wind farm must meet the following standards as a condition of receiving an approved license to operate within Essex Township:
- (1) Compliance with Building Code: A copy of the manufacturer's installation instructions and blueprints shall be provided to the Township. Included as part of or as an attachment to the installation instructions shall be standard drawings of the structural components of the WECS and support structures, including base and footings provided along with engineering data and calculations to demonstrate compliance with the structural design provisions of the applicable Building Code. Drawings and engineering calculations shall be signed and sealed by a professional engineer licensed in the State of Michigan.
 - (2) Rotor or Blade Safety: Each WECS shall be equipped with both a manual and automatic braking device capable of stopping the WECS operation in high winds (forty (40) mph or greater), during turbine failure or in conditions of imbalance.

- (3) Site Safety: To prevent unauthorized climbing, WECS must comply with all of the following provisions:
 - a. Tower climbing apparatus shall not be located on the outside of the tower, but must be located inside the tower; and
 - b. A locked anti-climb device shall be installed and maintained; and
 - c. A tower capable of being climbed shall be enclosed by a locked, protective fence at least ten (10) feet high with barbed wire fence.

- (4) Lighting: A lighting plan for each WECS shall be approved by the Township Board. Such plan must describe all lighting that will be utilized, including any lighting that may be required by the FAA. Such a plan shall include but is not limited to the planned number and location of lights, light color and whether any lights will be flashing. 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. Strobe lights are discouraged and must be shielded from the ground if such lights are allowed by the Township Board.

- (5) Electromagnetic Interference: Each WECS shall be designed, constructed and operated so as not to cause radio, wireless internet, telephone (both landline and cell phone) and television interference. In the event that electromagnetic interference is experienced, the applicant must provide alternate service to each individual resident or property owner affected.

- (6) Noise Immissions: Noise immissions from the operation of a WECS or wind farm shall include, but not be limited to, noise created from the mechanical movements of parts comprising a WECS, flow of air over and past the blades of a WECS, and construction and restoration of a WECS. Noise immissions shall not exceed (ii) forty (40) decibels on the dB(A) scale during the hours between 7 pm and 7 am. In addition, noise immissions shall not exceed fifty (50) decibels on the dB(C) scale during the hours between 7 pm and 7 am. Such noise immissions shall be as measured at the nearest property or lot line. All measurements shall be conducted in compliance with ANSI Standards for outdoor sound measurements. Applicable ANSI Standards include: S12.9, "Quantities and Procedures for Description and Measurement of Environmental Sound" Parts 1, 2, and 3; and S12.18 "Procedures for Outdoor Measurement of Sound Pressure Levels."

- (7) Noise Emissions: Noise emissions from the operation of a WECS shall not create any excessive noise that unreasonably interferes with the operation of any school, church, hospital or court or unreasonably disturb the quiet, comfort or repose of a person of reasonable sensitivities. Noise emissions from a warning device emitting sound for warning purposes as authorized by law shall be excluded.

- (8) Strobe effect (also known as shadow flicker): No WECS or wind farm shall cause any strobe effect or shadow flicker without written approval by the Township Board.
- (9) Vibrations/Wind Currents: Under no circumstances shall a WECS or wind farm produce vibrations or wind currents humanly perceptible beyond the property boundaries of the lot or parcel on which the WECS is located.
- (10) Environmental Assessment: At the Township's request, the applicant shall fund an environmental assessment or impact study and/or other relevant report(s) or studies (including, but not limited to, assessing the potential impact on endangered species, eagles, birds, and/or other wildlife) as required by the Township for review by the Township regarding the area or surrounding areas where the WECS will be placed. Each such study or report shall be provided to the Township prior to the time when the Township Board makes its final decision regarding the license.
- (11) Abandonment: Any WECS or Testing Facilities that are not used for six (6) successive months or longer shall be deemed to be abandoned and shall be promptly dismantled and removed from the property. All above and below ground materials must be removed. The ground must be restored to its original condition within 60 days of abandonment.
- (12) Security: If a license is approved pursuant to this Ordinance, the Township Board shall require security in the form of a cash deposit or irrevocable letter of credit (in a form, amount, time duration and with a financial institution deemed acceptable to the Township), which will be furnished by the applicant to the Township in order to ensure full compliance with this Ordinance and any conditions of approval. When determining the amount of such required security, the Township may also require an annual escalator or increase based on the Federal Consumer Price Index (or the equivalent or its successor). Such financial guarantee shall be deposited or filed with the Township Clerk after a license has been approved but before construction commences upon a WECS or WECS Testing Facility. At a minimum, the financial security shall be in an amount determined by the Township Board to be sufficient to have the WECS or Testing Facility fully removed (and all components properly disposed of and the land returned to its original state) should such structure or structures become abandoned, dangerous or obsolete, or not in compliance with this Ordinance or the license approval. Such financial security shall be kept in full force and effect during the entire time while a WECS or WECS Testing Facility exists or is in place. Such financial security shall be irrevocable and non-cancelable (except by the written consent of both the Township and the then-owner of the WECS or WECS Testing Facility) for at least 30 years from the date of the license approval, or until every WECS and WECS Testing Facility has been completely removed as required by this Ordinance, whichever comes later. Failure to keep such financial security in full force and effect at all times while a WECS or WECS Testing Facility exists or is in place shall constitute a material and significant violation of a license approval and this

Ordinance, and will subject the applicant to all available remedies to the Township, including possible enforcement action and revocation of the license. In addition, the Township Board may require, as a condition of any license issued under this Ordinance, that the owner of the parcel on which the WECS is to be located shall provide, in a form acceptable to the Township, a personal guarantee and record a lien against the parcel for the benefit of the Township to ensure the applicant's full compliance with this Ordinance and any conditions of approval, including the full costs of completely removing and disposing of the WECS and any accessory structures or materials from the parcel in their entirety.

- (13) Escrow: An escrow account shall be set up when the applicant applies for a license for a WECS or WECS Testing Facility. The monetary amount filed by the applicant with the Township shall be in an amount estimated by the Township to cover all costs and expenses associated with the license review and approval process, which costs can include, but are not limited to, fees of the Township Attorney, Township Planner and Township Engineer, as well as any reports or studies which the Township anticipates it may have done related to license review process for the particular application. Such escrow amount shall be in addition to regularly established fees. At any point during the license review process, the Township may require that the applicant place additional monies into escrow with the Township should the existing escrow amount filed by the applicant prove insufficient. If the escrow account needs replenishing and the applicant refuses to do so promptly, the license review and approval process shall cease until and unless the applicant makes the required escrow deposit. Any applicable zoning escrow resolutions or other ordinances adopted by the Township or by Clinton County shall also be applicable.

Section 4. Licensee Renewal, Review and Revocation.

- (a) **Renewal and Review:** Licenses shall be approved for a period of 5 years, subject to annual review and revocation. Not less than 60 days prior to the expiration of a license and December 31st of every year after approval of the license, the license holder shall submit to the Township Clerk a report of the operations of the WECS, any violations of the standards set forth above, any complaints received in writing and any known or projected changes or modifications from any information previously submitted to the Township for approval of a license. The Township Clerk will then forward all material to the Township Board to be reviewed at the next regularly scheduled Township Board meeting. Article 3 of this Ordinance shall apply to annual review of the license. If the reports or other evidence indicate that the licensee is in compliance with this Ordinance, as amended from time to time, and with the license, the license shall be renewed. If the evidence discloses that the licensee is not in compliance with this Ordinance or the license, the Township Board shall not renew the license and give the licensee 30 days to correct any such noncompliance. The licensee shall be given written notice by the Township Board with an itemized list of the items in noncompliance with this Ordinance or license. If the licensee corrects the deficiencies noted by the Township Board, a renewed license shall be issued.

- (b) **Inspection:** Not less than 60 day prior to the expiration of a license and December 31st of every year after approval of the license, the licensee shall make arrangements with the Township for an inspection of the WECS or wind farm by a member or designated agent of the Township Board. The Township Board member or designated agent may also be accompanied by an engineer, for which the licensee shall reimburse the Township upon being invoiced for the costs of the engineer's services.
- (c) **Revocation:** The Township Board shall review the information in the annual report and the inspector's report each year. If the reports or other evidence indicate that the licensee is not in compliance with this Ordinance, as amended from time to time, the licensee may be revoked at any time, after providing notice of such noncompliance, 60 days to correct any such noncompliance, and the opportunity for a hearing before the Township Board.

Section 5. Violations and Penalties.

- (a) **Applicability:** This Ordinance is applicable to all operators of any WECS or wind farm operating within the Township. Any person, firm, corporation, or any other organization, including the officers, directors, members or principals of any entities, which violates, disobeys, omits, neglects or refuses to comply with any provision of this Ordinance is subject to the violations set forth in this Ordinance.
- (b) **Criminal Penalty:** A violator of this Ordinance shall be subject to a criminal misdemeanor and be fined upon conviction no more than five hundred (\$500.00) dollars together with the costs of prosecution, or shall be punished by imprisonment in the Clinton County Jail for not more than ninety (90) days for each offense, or may be both fined and imprisoned as provided herein in the discretion of the Court. Each violation shall be deemed a separate offense. The imposition of any sentence shall not exempt an offender from compliance with the provisions of this Ordinance.
- (c) **Civil Infractions:** Any person or other entity who causes or permits to continue a violation of this Ordinance is responsible for a municipal civil infraction as defined by Michigan law and is subject to a civil fine of not more than \$500.00, plus costs, which may include all direct or indirect expenses to which the Township has incurred in connection with the violation. A violator of this Ordinance shall also be subject to such additional sanctions, remedies, and judicial orders as are authorized under Michigan law, including without limitation injunctive relief against such violations. Each day a violation of this Ordinance continues to exist constitutes a separate violation.
- (d) **Costs Incurred; Notice:** Violators shall also be responsible for reimbursing the Township for any costs incurred to enforce this Ordinance. Prior to the Township issuing an appearance ticket, municipal civil infraction or commencing judicial proceedings for a violation of this Ordinance, the Township shall give written notice of the violation(s) to the licensee by email or phone and followed by first class mail. Fourteen days shall be given after initial notification to correct the violation(s). If the violation(s) is not corrected within the fourteen days, the ticket, civil infraction may be issued or judicial proceedings commenced without further notice.

Section 6. Public Nuisance. The operation of any WECS or wind farm in Essex Township in violation of this Ordinance is hereby declared to be a public nuisance, and may be abated by order of any court of competent jurisdiction.

Section 7. Severability. Should a court of competent jurisdiction find any provision, clause, or portion of this Ordinance to be invalid, the balance or remainder of this Ordinance shall remain valid and in full force and effect and shall be deemed severable from the portion, clause, or provision deemed to be invalid by the court.

Section 8. Effective Date. This Ordinance shall become effective immediately after this Ordinance or a summary thereof is published in the newspaper as provided by law; except that any penalty provisions relating to the enforcement of this Ordinance shall be effective thirty (30) days after publication of this Ordinance as required by law.

Section 9. Effect on Other Ordinances. Except as expressly amended by this Ordinance, other Essex Township ordinances shall remain unchanged and in full force and effect.

Roll call vote taken:

YEAS: Rex Ferguson, James Gavenda, Carla Wardin, Kathleen George

NAYS: None

ABSTAIN/ABSENT: Angi Bunn

ORDINANCE DECLARED ADOPTED.

Carla Wardin

Carla Wardin, Essex Township Supervisor

CERTIFICATION

I hereby certify that:

1. The above is a true copy of an Ordinance introduced for adoption by the Essex Township Board at a duly scheduled and noticed meeting of that Township Board held on February 18, 2015, pursuant to the required statutory procedures.
2. The complete text of the proposed Ordinance was posted at the Township Clerk's office and on the Township's website on February 23, 2015.
3. The attached Notice of Adoption of the Ordinance was duly published in the *Clinton County News* newspaper, a newspaper that circulates within Essex Township, on February 28, 2015, within not more than seven (7) days after the posting.
4. Within 1 week after such publication, I recorded the above Ordinance in a book of ordinances kept by me for that purpose, including the date of passage of the ordinance, the names of the members of the township board voting, and how each member voted.
5. I filed an attested copy of the above Ordinance with the Clinton County Clerk on March 6, 2015.

Angela Bunn, Essex Township Clerk

NOTICE OF ORDINANCE ADOPTION

TO THE RESIDENTS AND PROPERTY OWNERS OF THE TOWNSHIP OF ESSEX, CLINTON COUNTY, MICHIGAN, AND ANY OTHER INTERESTED PERSONS.

PLEASE TAKE NOTICE that an ordinance addressing wind energy conversion systems (“WECS”) in the Township was adopted at a regular meeting of the Essex Township Board of Trustees on February 18, 2015. A summary of the Ordinance is as follows:

THE TOWNSHIP OF ESSEX, COUNTY OF CLINTON AND STATE OF MICHIGAN, ORDAINS:

SECTION 1: TITLE AND PURPOSE. Provides the title and purpose.

SECTION 2: DEFINITIONS. Defines the terms “Wind Energy Conversation System,” “Wind Farm,” and “WECS Testing Facility or Testing Facility.”

SECTION 3: LICENSE APPLICATION AND APPROVAL PROCEDURE AND STANDARDS. Provides the applicability of the Ordinance, license approval procedures and the standards for a licensee operating under an approved license.

SECTION 4: LICENSEE RENEWAL, REVIEW AND REVOCATION. Provides the annual review, inspection and renewal conditions for an approved license, as well as revocation procedures.

SECTION 5: VIOLATION AND PENALTIES. Designates the penalty of the Ordinance as a fine of not more than \$500.00 or ninety days in jail, a municipal civil infraction of not more than \$500.00, collection of costs incurred in enforcing the ordinance, and notice to those not in compliance with the Ordinance .

SECTION 6: PUBLIC NUISANCE. Provides that violation of the Ordinance is a public nuisance and may be abated by a court.

SECTION 7: SEVERABILITY. Declares the provisions of the Ordinance severable, providing for severability of any provision declared void or unenforceable by a court.

SECTION 8: EFFECTIVE DATE. Provides that the Ordinance shall be effective 30 days after legal publication.

SECTION 9: EFFECT ON OTHER ORDINANCES. Provides effect on other Township ordinances.

PLEASE TAKE FURTHER NOTICE THAT the full text of the ordinance, as adopted, has been posted, and is available for inspection at Township of Essex, 4848 W. Kinley Rd., St. Johns, MI 48879

Township of Essex
Angela Bunn, Clerk
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