Rome Township Lenawee County, Michigan (Ordinance No: _2011-02____)

At a ______ meeting of the Township Board of the Township or Rome, Lenawee County, Michigan, held at the Rome Township Hall on ______, 2011, at ______ p.m., Township Board Member ______ moved to adopt the following ordinance which motion was seconded by Township Board Member ______:

AN ORDINANCE REGARDING SPECIAL USE STANDARDS AND REGULATIONS FOR <u>WIND ENERGY</u> <u>CONVERSION SYSTEMS</u> AND RELATED MATTERS.

A. Purpose

Rome Township promotes the effective and efficient use of Wind Energy Conversion Systems with the minimum regulations on the siting, design, and installation of conversion systems so that the public health, safety, and welfare of neighboring property owners or occupants will not be jeopardized.

B. Definitions

- 1. <u>Wind Energy Conversion System</u> (WECS) shall mean any device such as wind charger, windmill, or wind turbine that converts wind energy to a form of usable energy.
 - a. Commercial WECS shall mean any WECS that is designed and built to provide electricity to the electric utility's power grid.
 - Personal Wind Generator shall mean any WECS that is located on the same lot, and is designed and built to serve the needs of the principal use. (<u>See Rome</u> <u>Township Personal Wind Generation Ordinance</u>)
 - c. Has a nameplate capacity of 100 kilowatts or more; and
 - d. Has a total height of 170 feet or more.
- 2. <u>Manual and Automatic Controls</u> give protection to power grids and limit rotation of a WECS' blades to below the designed limits of the conversion system.
- 3. <u>An Authorized Factory Representative</u> shall mean an individual with technical training of a WECS who has received factory installation instructions and is certified in writing by the manufacturer of the WECS.
- 4. A <u>Professional Engineer</u> ("PE") shall mean any licensed engineer registered in the State of Michigan.
- 5. A <u>Utility Scale wind farm</u> shall mean all wind farms that produce greater than 100 kilowatts of energy.
- 6. <u>Facility Abandonment</u> shall mean out of production for a period of time not less than one (1) year.
- 7. <u>Survival Wind Speed</u> shall mean the maximum wind speed, as designated by the WECS manufacturer, at which a WECS in unattended operation (not necessarily

producing power) is designed to survive without damage to any structural equipment or loss of the ability to function normally.

- 8. <u>WECS Height</u> shall mean the distance between the ground (at normal grade) and the highest point of the WECS, as measured from the ground (at normal grade), plus the length by which the rotor blade on a horizontal mounted WECS exceeds the structure which supports the rotor and blades (normally, the tower). Or put another way, the distance between the ground (at normal grade) and the highest point of the WECS (being the tip of the blade, when the blade is in the full vertical position).
- 9. <u>A WECS Testing Facility or Testing Facility</u> shall mean structure and equipment used to determine the potential for the placement of a WECS.
- 10. <u>Applicant</u> means the person, firm, corporation, company, limited liability corporation ("LLC") or other entity which applies for Township approval under this section, as well as the applicant's successor(s), assign(s) and/or transferee(s) as to any approved WECS or Testing Facility. An applicant must have the legal authority to represent and bind the landowner or lessee who will construct, own, and operate the WECS or Testing Facility. The duties and obligations regarding a zoning approval for any approved WECS or Testing Facility shall be with the owner of the WECS or Testing Facility and severally with the owner and operator or lessee of the WECS or Testing Facility if different than the owner.
- 11. <u>Tower</u> means the monopole, freestanding, or guyed structure that supports a WECS, turbine or other wind generating components.
- 12. <u>Administrator</u> means the Township of Rome Zoning Administrator or any authorized officer, agent, employee or representative of The Township of Rome.

C. Permit Requirements

- 1. A <u>Building Permit</u> shall be required for the installation of a WECS.
- 2. An <u>Electrical Permit</u> shall be required for the installation of a WECS.
- 3. A <u>Special Use Permit</u> shall be required for the installation of a WECS.
- 4. The <u>Special Use application</u> shall be accompanied by a site plan in accordance with Section 11.35 of the Rome Township Zoning Ordinance. In addition to the requirements of Section 11.35 the site plan shall also include the following:
 - a. Location, elevation and height of proposed WECS.
 - b. The right-of-way of any public road that is contiguous with the property.
 - c. Location and dimensions (including height) of all existing structures located on the proposed WECS site;
 - d. Location and design of all roads intended to be constructed for access to the WECS site.
 - e. Current land use and zoning classification for all adjacent parcels;
 - f. Location and height of any tree, pole, antennae, or similar structure over thirtyfive (35) feet in height within 500 feet of any proposed tower location.
 - g. Any additional requirements deemed necessary by the Planning Commission.

- 5. The applicant shall submit an <u>Impact Analysis</u> as part of the Special Use application, prepared by a registered structural engineer, evaluating the likely impacts of the proposed facility regarding:
 - a. Anticipated noise and vibration levels at all property lines;
 - b. Potential impacts on wildlife, including native and migrating birds;
 - c. "Shadow Flicker" and glare impacts on all adjacent properties;
 - d. Radio and/or television interference;
 - e. Aesthetic impacts of the WECS, especially on adjacent properties.
- 6. Detail Drawings of the structural components of the large WECS, including structures, tower, base, and footings. A registered structural engineer shall certify the drawings and any necessary calculations that the system complies with all applicable local and state building and electrical codes.
- The owner or operator of the WECS shall maintain a current insurance policy with a bond rating acceptable to the Township to cover installation and operation of the WECS project. The amount of the policy shall be established as a condition of the Special Use Permit.
- The WECS must contain a Decommissioning Plan to ensure it is properly decommissioned upon the end of the project life or facility abatement. (See Section H for more on Decommissioning Plan.)

D. Principal/ Accessory Use

WECS' may be considered as either a principal or accessory use. An existing use on the same parcel(s) shall not preclude the installation of a large WECS.

E. Site and Development Requirements

- 1. WECS' shall maintain a minimum setback of at least one and a half (1.5) times the tower and blade height from any public road right-of-way line or property line.
- 2. WECS' shall maintain a minimum distance of at least the combined tower and blade height from any habitable structure.
- 3. WECS' shall be constructed such that the minimum height of the lowest position of the blades is at least thirty (30) feet above the ground.
- 4. WECS' shall be exempt from the height restrictions in the zoning district in which it is located.
- 5. WECS' and supporting structures shall either maintain a galvanized steel finish, or subject to any applicable standards of the FAA, be painted and maintain a neutral color intended to reduce visual obtrusiveness to the greatest extent feasible.
- 6. WECS' shall meet the standards of the FAA, the FCC, and any other agency of the State of Michigan or Federal Government with authority to regulate towers and tall structures. The applicant shall submit statements, permits and/or licenses from the applicable agencies attesting to compliance with the applicable standards prior to the issuance of any permits.
- 7. The towers and other structures associated with a WECS' shall not be artificially lighted by any means or in any fashion unless required by the FAA.

8. No advertising or identification may be displayed on any tower, structure, or other component of a WECS except for safety/ emergency purposes as required.

F. Safety Measures

- 1. The WECS shall be designed and certified by a registered engineer to withstand wind loading and other conditions experienced in severe weather, as required by the Michigan Building Code.
- 2. A registered engineer shall certify that the WECS is equipped with both manual and automatic controls to limit the rotational speed of the rotor blade so it does not exceed the design limits of the rotor.
- 3. All components of a WECS shall be properly grounded to safely sustain natural lightning strikes in conformance with the Michigan Building Code and Michigan Electrical Code.
- 4. A registered engineer shall certify that the large WECS is designed and constructed to not cause radio and/or television interference.
- 5. All WECS facilities shall be equipped with anti-climbing devices and features. No tower climbing apparatus shall be permitted to be located within twelve (12) feet of the ground.
- The base of all WECS' facilities, including towers, wire cable supports, and accessory buildings may be enclosed by a locked protective chain link fence a minimum of six (6) feet in height. The Planning Commission may specify additional fencing requirements relative to the height and type of fencing as deemed necessary.
- 7. All WECS structures shall be posted with at least one (1) safety/warning sign. The Zoning Administrator shall determine the location and placement of the signs. Each sign shall not exceed two (2) square feet in size, and shall contain the following information:
 - a. "WARNING: High Voltage."
 - b. Manufacturer's name.
 - c. Operators name.
 - d. Emergency phone number.
 - e. Emergency shutdown procedure
- 8. Every WECS 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 Rome Township and considered a part of the special use permit.

G. Abandonment

- Any time a WECS remains non-functional or inoperative for a period of at least one (1) year; the owner shall notify the zoning administrator and supply him/her with a written plan for the future usage and future maintenance of the WECS.
- 2. Upon failure of the owner to supply the Zoning Administrator with an acceptable plan for the future maintenance and/ or future use of the WECS, the Zoning

Administrator shall determine the WECS to be a public nuisance and require the demolition/ removal of the WECS along with restoration of the grounds to the condition which existed prior to the construction of the WECS.

3. If the WECS is determined to be abandoned, the owner of the WECS shall remove the wind generator and the tower at the Owner's sole expense within 3 months of receipt of Notice of Abandonment. If the owner fails to remove the wind generator or the tower, the Administrator may pursue a legal action to have the wind generator removed at the Owner's expense.

H. Decommissioning Plan

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.

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. The decommissioning plan shall also include an agreement between the applicant and the Township that:

- 1. The financial resources for decommissioning shall be in the form of a surety bond, or shall be deposited in an escrow account with an escrow agent acceptable to Rome Township.
- 2. The Township shall have access to the escrow account funds 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.
- 3. The Township is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning.
- 4. The Township is granted the right to seek injunctive relief to effect or complete decommissioning, as well as Township's right to seek reimbursement from applicant or applicant successor for decommissioning costs in excess of the amount deposited in escrow and to file a lien against any real estate owned by applicant or applicants 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. Financial provisions shall not be so onerous as to make wind power projects unfeasible.

I. Violations

It is unlawful for any person to construct, install, or operate a small wind energy system that is not in compliance with this ordinance or with any condition contained in a building, electrical or special use permit issued pursuant to this ordinance. Wind energy conversion systems installed prior to the adoption of this ordinance are exempt.

J. Administration and Enforcement

- 1. This ordinance shall be administered by the Administrator or other official as designated.
- 2. The Administrator may enter any property for which a permit has been issued under this ordinance to conduct an inspection to determine whether the conditions stated in the permit have been met.
- 3. The Administrator may issue orders to abate any violation of this ordinance.
- 4. The Administrator may issue a citation for any violation of this ordinance.
- 5. The Administrator may refer any violation of this ordinance to legal counsel for enforcement.

K. Penalties

Any person who fails to comply with any provision of this ordinance or permit issued pursuant to this ordinance shall be subject to enforcement and penalties as stipulated in Section 14.15 of the Rome Township Zoning Ordinance.

L. Severability

Should any portion of this ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance shall not be affected.

YEAS: NAYS: ABSTAIN/ABSENT: ORDINANCE/ ORDINANCE AMENDMENTS DECLARED ADOPTED.

CERTIFICATION

I hereby certify that the above is a true copy of an ordinance/ordinance amendment adopted by the Rome Township Board at a ______ meeting held on _____, 2011, pursuant to the required statutory procedures.

Respectfully submitted by:

Dated: _____, 2011

Rome Township Clerk