

**ADAMS TOWNSHIP ORDINANCE NUMBER:** 2014-09-02

**WIND TURBINE POWER GENERATION ORDINANCE**

**ADOPTED:** 9-29-2014

**EFFECTIVE 30 DAYS AFTER PUBLICATION**

Regulation of Wind Turbine Power Generation.

This ordinance is enacted pursuant to Michigan Compiled Law 41.181.

**Adams Township, Houghton Adams Township, Michigan ordains:**

**Section 1. Purpose.** To protect the safety, health, prosperity, comfort, convenience and welfare of the public from potential negative effects of wind turbine generators while permitting their appropriate use, this ordinance is intended to:

- 1.1 Protect residential areas from potential adverse impact of wind turbine generators.
- 1.2 Consider the public health and safety of wind turbine generators; and
- 1.3 Avoid potential damage to adjacent property from the failure of wind turbine generators or anemometer towers.

**Section 2. Application for approval.** All commercial wind turbine generators must have a permit issued by the Adams Township prior to beginning construction. Every application for a commercial wind turbine generator permit shall be made in writing to the Adams Township Supervisor accompanied by any and all filing fees. The permit application shall include but is not limited to the following information.

- 2.1 Name and address of the applicant.
- 2.2 Evidence that the applicant is the owner of the property involved or has written permission of the owner to make such application.
- 2.3 A plot and development plan drawn in sufficient detail to clearly describe the following:
  - a. Physical dimensions of the property, existing structures, and proposed structures.
  - b. Location of existing and proposed structures.
  - c. Location of electrical lines and facilities.
  - d. Existing topography.
  - e. Proposed grading and removal of natural vegetation.

- e. Proposed grading and removal of natural vegetation.
- f. Setbacks.
- g. Ingress and egress identifying the location and distance to the nearest improved road.

2.4 Utility interconnection data and a copy of written notification to the utility of the proposed interconnection.

2.5 Specific information of the type, size, height, rotor material, rated power output, performance, safety, and noise characteristics of each WTG model, tower and electrical transmission equipment. Structure may not be installed without the prior written approval of the Township.

**Section 3. State or Federal Requirements.** Any proposed wind turbine generator or anemometer tower shall meet or exceed any standards and regulations of the FAA, the Michigan Public Service Commission, National Electric Safety Code, U.S. Fish and Wildlife Service and any other agency of the local, state or federal government with the authority to regulate wind turbine generators or other tall structures in effect at the time the permit is issued.

**Section 4. On Site Use Wind Energy Systems.** An On Site Use wind energy system is intended to serve the needs of the consumer and does not transmit power to a commercial grid. On Site Use wind energy systems with no towers or towers 100 feet or less are allowed subject to the following requirements.

4.1 Property Set-back: The distance between an On Site Use wind energy system and the owner's property lines shall be at least the height of the wind energy system tower including the top of the blade in its vertical position. The distance between an anemometer tower and the owner's property lines shall be at least the height of the tower. No part of the wind energy system structure, including guy wire anchors, may extend closer than ten feet to the owner's property lines.

4.2 Sound Pressure Level: On Site Use wind energy systems shall not exceed 55 dB(A) at the property line closest to the wind energy system. This sound pressure level may be exceeded during short-term events such as utility outages and/or severe wind storms. If the ambient sound pressure level exceeds 55 dB(A), the



standard shall be ambient dB(A) plus 5 dB(A).

4.3 Vibrations. Any wind turbine generator shall not produce vibrations humanly perceptible beyond the boundaries of the property on which it is located.

**Section 5. Commercial Wind Energy Systems.** Every wind turbine generator (WTG) that exceeds 100 feet in height or that is connected to supply energy to a commercial grid is a commercial wind energy system and must comply with the permitting requirements of this ordinance

5.1 Property Set-back: The distance between a commercial wind energy system and the owner's property lines, a street, highway, or road, or a house or inhabited structure on adjacent property shall be at least 3000 feet.

5.2 Sound Pressure Level: On Site Use wind energy systems shall not exceed 55 dB(A) at the property line closest to the wind energy system. This sound pressure level may be exceeded during short-term events such as utility outages and/or severe wind storms. If the ambient sound pressure level exceeds 55 dB(A), the standard shall be ambient dB(A) plus 5 dB(A).

5.3 Vibrations. Any wind turbine generator shall not produce vibrations humanly perceptible beyond the boundaries of the property on which it is located.

**Section 6. Tower Lighting.** Each wind turbine generator or anemometer tower shall not be artificially lighted, unless required by the Federal Aviation Authority (FAA) or other applicable governmental authority. If lighting is required, the lighting shall be the lowest intensity allowable under FAA regulations. Red or white intermittent lighting is permissible. All tower lighting required by the FAA shall be shielded to the extent possible and acceptable to the FAA to reduce glare and visibility from the ground.

**Section 7. Effect or Impact on Wildlife.** Development and operation of a commercial wind energy facility shall not have a significant adverse impact on migratory bird species, bats, endangered or threatened fish, wildlife, or plant species or their critical habitats, or other significant habitats identified by the Michigan Department of Natural Resources and/or the studies of the U.S. Fish and Wildlife Service. Commercial wind energy facilities must adhere to the guidelines set forth by the U.S. Fish and Wildlife Service, "Land-Based Wind Energy

Guidelines" ([http://www.fws.gov/windenergy/docs/weg\\_final.pdf](http://www.fws.gov/windenergy/docs/weg_final.pdf)), Federal Register: March 26, 2012 (77FR 17496) as evidenced by a concurrence letter from the Service stating that the developer has fully followed the Guidelines.

Post construction monitoring must be conducted at any constructed commercial wind generating facility using a protocol and duration approved by the MI DNR and U.S. Fish and Wildlife Service with annual reports submitted to both agencies and Adams Township

**Section 8. Electromagnetic Interference.** All wind turbine generators shall be constructed and operated so that they do not interfere with television, telephone (including cellular and land line), microwave, navigational, or radio reception to neighboring areas. The applicant and/or operator of the facility shall be responsible for the full cost of any remediation necessary to correct any problems, including relocation or removal of the facility, caused or exacerbated by the operation of such equipment and any and all related transmission lines, transformers, and other components related thereto.

**Section 9. Sign.** A sign no more than four (4) square feet in area displaying an address and toll-free telephone number, answered by a person twenty-four hours per day, seven days per week, for emergency calls and informational inquiries shall be posted at the proposed wind turbine generator or anemometer tower erected prior to a wind turbine generator. No wind turbine generator tower or anemometer tower or site shall include any advertising sign.

**Section 10. Removal.** Any wind turbine generator or anemometer tower that is not operated for a continuous period of nine (9) months shall be considered abandoned, and the owner of such wind turbine generator or anemometer tower shall remove the same within ninety (90) days of receipt of notice from Adams Township. In addition to removing the wind turbine generator, or anemometer tower, the owner shall restore the site of the wind turbine generator or anemometer tower to its original condition prior to location of the wind turbine generator or anemometer tower. Any foundation associated with a wind generator or anemometer tower shall be totally removed and the site restored to its original state including the planting of any grasses or cover crops, which may have been present prior to construction. Any and all transmission equipment, buildings and fences shall also be removed. Failure to remove an abandoned wind turbine generator or anemometer tower within the ninety (90) day period



provided in this subsection, or in the event that the owner or operator of the wind turbine generator or anemometer tower is no longer financially capable, or fails to respond to mail sent to its last address on file with the Adams Township, shall be grounds for Adams Township to remove the wind turbine generator or anemometer tower structure and all associated equipment or appurtenances at the owner's expense. Adams Township may sell any salvageable material, deducting the balance due from the cash bond, which Adams Township shall require.

Adams Township shall further require the applicant to post a cash or surety bond equal to 50% of the original cost of the tower structure and attendant structures to assure the removal of such abandoned structures and remediation of any toxic or hazardous materials left on the site as a condition of a special use permit given pursuant to this section. In the event that a surety bond is to be substituted for a cash bond, it shall be prepaid for a period of five years, with the insurance carrier instructed to notify Adams Township of any delinquency in payment within thirty (30) days of the occurrence of such delinquency. Such delinquency shall be considered abandonment and full and sufficient grounds for the Adams Township to terminate the special use permit and dispose of the equipment and appurtenances as stated above.

**Section 11. Severance Clause.** If any section, clause, or provision of the Ordinance is declared unconstitutional or otherwise invalid by a court of competent jurisdiction, said declaration shall not affect the validity of the remainder of the Ordinance as a whole or any part thereof, other than the part so declared to be unconstitutional or invalid.

**Section 12. Definitions.**

12.1 ANEMOMETER. An instrument for measuring and recording the speed of the wind.

12.2 ANEMOMETER TOWER. A structure, including all accessory facilities, temporarily erected for no more than two (2) years, on which an anemometer is mounted for the purposes of documenting whether a site has wind resources sufficient for the operation of a wind turbine generator.

12.3 WIND TURBINE GENERATOR (WTG). A tower, pylon, or other structure, including all

accessory facilities, upon which any, all or some combination of the following are mounted:

- a. A wind vane, blade, or series of wind vanes or blades, or other devices mounted on a rotor for the purpose of converting wind into electrical or mechanical energy.
- b. A shaft, gear, belt, or coupling device used to connect the rotor to a generator, alternator, or other electrical or mechanical energy producing device.
- c. A generator, alternator, or other device used to convert the energy created by the rotation of the rotor into electrical or mechanical energy.

#### 12.4 WIND TURBINE GENERATOR TOWER HEIGHT.

- a. Horizontal Axis Wind Turbine Rotors: The distance between the ground and the highest point of the wind turbine generator, plus the length by which the rotor wind vanes or blades mounted on a horizontal axis wind turbine rotor exceeds the height of the wind turbine generator.
- b. Vertical Axis Wind Turbine: The distance between the ground and highest point of the wind turbine generator.

**Section 13. Penalty for violation.** Any person, firm or corporation who violates or fails to comply with the provisions of this Ordinance shall be deemed guilty of a misdemeanor and shall, upon conviction, be punished by a fine of not more than \$100.00 per day for each separate violation, and costs of prosecution, or by imprisonment in the county jail for a term not exceeding ninety (90) days, or by both such fine and imprisonment, in the discretion of the Court. Each day that a violation of this Ordinance exists shall constitute a separate offense.

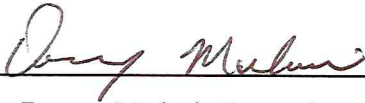
**Section 14. Injunction.** The Township may bring an action in a court of competent jurisdiction against a person to enjoin that person from engaging or continuing in a violation of this ordinance.

**Section 15. Enforcement.** The Township may appoint a representative to enforce this ordinance.

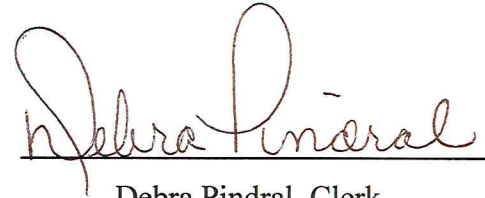
**Section 16. Effective Date.**

16.1 This Ordinance shall become effective Thirty (30) days after publication.

16.2 This ordinance was adopted by the Adams Township Board at the meeting conducted on September 29, 2014.



Denny Mulari, Supervisor



Debra Pindral, Clerk