

On-site Wind Energy Systems & MET Installations

Zoning Ordinance of Huron County *excerpts*

Article IV. AGR Agricultural Districts

Eff. Date December 1, 2006, with amended height of MET's July 1, 2007

Amend specific sections within Article IV. AGR Agricultural District as listed herein to read as follows (any section not listed is to remain as previously adopted):

Amend Section 4.01 Intent and Purpose to read:

The Agricultural Districts are designated to preserve those areas historically used for farming and animal husbandry, dairying, horticulture and other agricultural activities. At the same time, in order to provide a degree of flexibility, it is the intent of these provisions to allow single family, non-farming dwellings and related residential uses on larger parcels and certain limited uses related to farming. In addition, an "overlay zoning" technique is incorporated into this Ordinance to encourage the development of alternative energy resources in the Agricultural District (wind energy, biomass digesters, etc.) as well as to preserve large tracks of land within the district for future agriculture use.

Amend Section 4.02 by adding the following new subsections N) and O): Add to Uses Permitted by Right in the Agricultural District

N) Anemometer towers (MET) used to conduct wind assessment studies for possible installation of wind energy conversion facilities. Anemometer towers & attached equipment are limited to a height of 199 feet and shall be located to conform to a height vs. setback requirement of 1 ½ times the height of the tower. Use temporary towers (those without permanent foundations) are limited to a two (2) year period.

O) On-Site Wind Energy Systems and related wind site assessment devices, subject to the conditions described below:

1) An on-site use wind energy system is intended to serve the needs of the on-site consumer. An on-site use wind energy system with a tip height of 45 meters (150 feet) or higher shall be considered a large-scale wind energy conversion facility for siting purposes (refer to Article X of this Ordinance).

2) Anemometer towers (MET) used to conduct a wind site assessment for possible installation of an on-site use wind energy system must conform to a height vs. setback requirement of 1 ½ times the height of the tower. Anemometer towers & attached equipment are limited to a height of 199 feet.

3) Prior to the installation of an on-site wind energy system, an application for a site permit shall be filed with the Zoning Administrator that shall include:

- a. Application identification (property ownership, property identification number).
- b. A site plan (location of proposed use vs. property lines, buildings, roadways, right-of-ways, easements, etc.).
- c. Documentation that sound pressure level, construction code, tower interconnection (if applicable), and safety requirements have been met.
- d. Proof of the applicant's public liability insurance.

Prior to the installation of an anemometer tower more than 20 meters (66 feet) in height, a site permit shall be filed with the zoning administrator that will include:

- e. Applicant information (property ownership, property identification number).

f. A site plan (location of proposed use vs. property lines, buildings, roadways, right-of-ways, easements, etc.).

g. A copy of that portion of the applicant's lease with the land owner granting authority to install the Met tower and requiring the applicant to remove all equipment and restore the site after completion of the wind site assessment.

h. Proof of the applicant's public liability insurance.

4) On-Site Wind Energy Systems Site Permit Application

a. An on-site wind energy system is designed and intended to primarily serve the needs of the consumer. Prior to the installation of an on-site wind energy system, an application for a site permit must be filed and subsequently approved by the zoning administrator and shall include the following:

i. Applicant information: name, address and contact information.

ii. Project description: A general description of the proposed project including a legal description (property identification number) of the property on which the project would be located.

iii. Site Plan: The site plan shall include maps showing the physical features and land uses of the project area, both before and after construction of the proposed project. The site plan shall include:

- the project area boundaries.

- the location, height and dimensions of all existing and proposed structures and fencing.

- the location, grades and dimensions of all temporary and permanent on-site and access roads from the nearest county or state maintained road.

- existing topography.

- water bodies, waterways, wetlands, and drainage ditches (county drains).

- all new infrastructure above ground related to the project.

iv. Insurance: Proof of the applicant's public liability insurance.

v. Consent documents: Copies of any written waivers from neighboring property owners.

vi. Sound Pressure Level: A copy of the modeling and analysis report for the system to be installed.

vii. Certifications: Certification that applicant has complied or will comply with all applicable state and federal laws and regulations.

5. An on-site wind energy system shall meet the following standards and requirements:

a. Property setbacks:

i. The distance between an on-site wind energy use/tower and the owner's property lines shall be at least 1 ½ times the height of the wind energy system tower including the top of the blade in its vertical position (tip height).

ii. The distance between an anemometer (met) tower and the owner's property lines shall be at least 1 ½ times the height of the tower.

iii. Exceptions for neighboring properties are allowed with the written consent of those property owners. Written consent letters must be submitted at the time of the site permit.

iv. No part of the wind energy system structure, including guy wire anchors, may extend closer than ten (10) feet to the owner's property line.

6. Other Required Setbacks:

a. The distance between an on-site wind energy system and a road or a public right-of-way shall be at least 1 ½ times the height of the wind energy system tower including the top of the blade in its vertical position (tip height).

b. The distance between an anemometer (met) tower and a road or a public right-of-way shall be at least 1 ½ times the height of the tower.

7. Sound Pressure Level:

a. On Site wind energy system shall not exceed 55 dBA at the property line closet to the wind energy system.

b. Exceptions for neighboring property are allowed with the written consent of those property owners.

c. 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 dBA, that standard shall be ambient dBA plus 5 dBA.

8. Construction Codes, Towers & Interconnections Standards:

a. On-site wind energy systems including towers shall comply with all applicable state construction and electrical codes and local building permit requirements.

b. On site wind energy systems including towers shall comply with Federal Aviation Administration requirements, the Michigan Airport Zoning Act, The Michigan Tall Structures Act, and local jurisdiction airport overlay zoning regulations.

c. An interconnected on-site wind energy system shall comply with Michigan Public Service Commission and utility interconnection requirement. Off-grid system share exempt from this requirement.

9. Safety:

a. An onsite wind energy system shall have a governing, or a feathering system to prevent uncontrolled rotation or over speeding.

b. All wind energy towers shall have lightning protection.

c. If a tower is supported by guy wires, the wires shall be clearing visible to a height of a least six (6) feet above the guy wire anchors.

d. The minimum vertical blade tip clearance from grade shall be 20 feet for a wind energy system employing a horizontal axis rotor.