Section 5.16 On-site Wind Energy Systems

(a) Intent and Purpose. It is the intent and purpose of this section to establish rules and regulations for the construction, alteration, and operation of On-site Wind Energy Systems, while protecting the health, welfare, safety, and quality of life of the general public, and to ensure compatible land uses in the vicinity of the areas affected by such facilities. The provisions of this section shall supplement other provisions of this ordinance regarding Special Land Uses for Wind Energy Systems. In the event of a conflict between the provisions of this section and any other section of this ordinance, the provisions of this section shall apply.

(b) Definition. An On-site Wind Energy System is an electricity generating system consisting of one or more wind turbines under common ownership or control which produces electricity primarily intended for use on the premises where the On-site Wind Energy System is located and which does not exceed 100 feet in total height. This definition includes substations, towers, cables, wires, poles and other buildings and accessories used on the production of electricity by said facility. An On-site Wind Energy System may be referred to in this ordinance as an OWES.

(c) Accessory Use by Right. An OWES shall be considered an accessory use by right in all zoning districts.

(d) No OWES may be located, constructed, maintained or operated on any parcel which does not meet all of the following requirements:

(1) Maximum Height. A maximum total height of 100 feet

(2) Setback.

A wind turbine tower may not be located closer to any property line and the nearest right of way line for any public road than One and One-half (1 ½) times the total height of the wind turbine measured from the center of the tower. All other parts of the OWES, including the guy wire anchors, may not be located closer than ten (10) feet from any property line and the nearest right of way line for any public road, or the minimum setback distance in the zoning district in which the OWES is located, whichever is greater.

(3) Sound.

Sound pressure level shall not exceed forty (40) dB(A) LAmax at the property line closest to the wind energy system.

(4) Signal Interference.

No OWES shall interfere with any existing fixed broadcast, retransmission or reception antennae for radio, television, wireless telephone or other personal communication system or emergency broadcast system unless the owner/operator provides a replacement signal to the affected party at no additional cost that will restore reception to at least the level present before the operation of the OWES. No OWES shall causes significant electromagnetic interference to any microwave communication link which is in operation at the time a certificate of zoning compliance for the OWES is issued.

(5) Visual Appearance.

All On-site Wind Energy Systems shall meet the following visual requirements:

(A) On-Site Wind Energy Systems and accessory structures shall be painted a non-reflective non-obtrusive color. The exterior shall be maintained in good condition and the towers shall be repainted whenever rust, corrosion or peeling or flaking paint is visible.

(B) On-site Wind Energy Systems shall not be lighted unless so required by statute, ordinance, rule, or regulation.

(C) On-site Wind Energy Systems shall contain no letters, numbers, or symbols other that the name of the manufacturer and the name of the owner/operator unless otherwise required by this ordinance or any other statute, ordinance, rule, or regulation. Any such letters, numbers, or symbols may not exceed six inches in height. Every On- site Wind Energy System must have a sign or lettering identifying its owner/operator and containing contact information.

(6) Construction Codes, Towers, &Interconnection Standards.

On-site Wind Energy Systems including towers shall comply with all applicable state construction and electrical codes and local building permit requirements. On-site Use wind energy systems 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 of1959, MCL259.481 et seq.), and local jurisdiction airport overlay zone regulations. An interconnected On-site Use wind energy system shall comply with Michigan Public Service Commission

and Federal Energy Regulatory Commission standards. Off-grid systems are exempt from this requirement.

(7) Safety.

An On-site Wind energy system shall have automatic braking, governing, or a feathering system to prevent uncontrolled rotation or over speeding. All wind towers shall have lightning protection. If a tower is supported by guy wires, the wires shall be clearly visible to a height of at least six feet above the guy wire anchors. The minimum vertical blade tip clearance from grade shall be twenty(20) feet for a wind energy system employing a horizontal axis rotor.

(e) Site Plan. An application for a zoning compliance certificate for an OWES shall be accompanied by a site plan which shall contain all of the following in addition to any other information required by this ordinance:

(1) The dimensions and location of all boundary lines and contiguous public roads for the parcel on which the OWES will be located.

(2) The location, height, and dimensions of all existing and proposed structures, driveways, and other above ground infrastructure and the distance from all property lines and public roads.

(3) Certification that applicant has complied or will comply with all applicable federal, state, and local laws and regulations.

(4) Certification that the sound pressure level of the proposed OWES will not exceed the limits provided herein.