

Approved Nov 9, 2011

Chassell Township

Tower Ordinance

Wireless Communication Facilities, Wind Energy Systems
Zoning Ordinance

SECTION 11

11.1 Purpose and Intent:

To protect public health and safety, Chassell Township has adopted a Tower Ordinance that regulates and provides guidance, approval, and denial processes for requests for installation of Tower Systems.

The regulations of this Section are intended to conform with federal laws and administrative rules governing facilities needed to operate wind towers and wireless communication systems and to set forth procedures and standards for review and approval for the location of such facilities within Chassell Township. It is the Township's intent to reasonably regulate the location and design of such facilities to retain the integrity of neighborhoods and the character, property values and aesthetic quality of the township. In recognition of the Township's concern that technological advances may render certain Wind Tower or Wireless Communication Facilities obsolete or unnecessary in the future, requirements are set forth for the removal of unused or unnecessary facilities in a timely manner and provide security for removal.

11.2 APPLICABILITY:

The Chassell Township Tower Ordinance applies to all Zones within the boundaries of Chassell Township. All Towers over 75 feet tall will need a Permit. Towers under 75 feet will still require setbacks and noise restrictions etc as outlined below.

All Towers in Chassell Township over 200 feet will require a public hearing. All adjacent property owners, and owners within 300 feet of the tower property shall be notified in writing of the hearing and published in the newspaper twice beginning 2 weeks before the hearing.

11.3 DEFINITIONS:

“Applicant” means the person or persons, or entity applying for installation of a Tower System

“Attached Wireless Communication Facilities” Wireless communication facilities affixed to existing structures, including but not limited to existing buildings, towers, water tanks, or utility poles.

“Co-location” Location by two (2) or more wireless communication providers of wireless communication facilities on a common structure, tower, or building, to reduce the overall number of structures required to support wireless communication antennas within the township.

“Decommissioning” means removal of a Tower System due to inoperation for a continuous period of 12 months, or the Tower System is deemed to be unsafe or out of compliance with federal, state and/or local regulations or codes.

“FAA” Federal Aviation Administration.

“Fall Zone” The term fall zone shall mean the calculated manner and extent to which a tower structure is designed to fall as certified by a State of Michigan licensed and registered professional engineer. .

“Flicker” or “Shadow Flicker” means the effect that results when the shadow cast by the rotating blade of a Large Wind Energy System moves across a fixed point.

“Large Wind Energy System” means a Wind Energy System that has a capacity of more than 100 kilowatts, or a total height of 170 feet or more, or both.

“Met (Meteorological Tower) or SCADA (Supervisory Control and Data Acquisition) Tower” means a tower, including any anchor, base, base plate, boom, cable, electrical or electronic equipment, guy wire, hardware, indicator, instrument, telemetry device, vane, wiring, or any other device, that is used to collect or transmit meteorological data, including wind speed and wind flow information, in order to monitor or characterize wind resources at or near an existing or proposed Large Wind Energy System.

“Nonparticipating Property” means real property on which either there is no Tower or Wind Energy System. Or there is a Wind Energy System that is in a different Wind Farm System than another Large Wind Energy System.

“Owner” means the person or persons, or entity that owns or proposes to own a Large Wind Energy System or Met or SCADA Tower and the property on which the Large Wind Energy System or Met or SCADA Tower is or proposes to be located.

“Participating Property” means real property on which a Tower or Large Wind System is located and that is in the same ownership or easement as the Tower or Wind Farm System.

“Special Use Permit” means a permit for the installation of a Large Wind Energy System, as described in Section 10.3, Special Use Permits, of the Chassell Township Zoning Ordinance.

“Small Wind Energy System” means a Wind Energy System that has a capacity of 100 kilowatts or less, or a total height of less than 170 feet, or both and is primarily used to generate energy for the use by its land owner.

“Total Height” means the vertical distance from ground level to the tip of a wind generator blade when the tip is at its highest point.

“Tower” or “Tower System” means either the freestanding, guyed, or monopole structure that supports a wind generator, a Met or SCADA Tower or Wireless Communication Structure.

“Township” means Chassell Township.

“Wind Energy System” means equipment that converts and then stores or transfers energy from the wind into usable forms of energy and includes any base, blade, foundation, generator, rotor, tower, transformer, turbine, vane, wire, or other component used in the system.

“Wind Farm System” means a Large Wind Energy System that includes more than one Tower.

“Wind Generator” means the mechanical and electrical conversion components mounted on or near the Tower.

“Wireless Communication Facilities” All structures and accessory facilities relating to the use of the radio frequency spectrum for the purpose of transmitting or receiving radio signals. This may include, but shall not be limited to, radio towers, television towers, telephone devices, personal communication transmission equipment and exchanges, microwave relay towers, telephone transmission equipment building and commercial mobile radio service facilities.

“Wireless Communication Support Structures: Structures erected or modified to support wireless communication antennas. Support structures within this definition include, but shall not be limited to, monopoles, lattice towers, light poles, wood poles and guyed towers, or other structures which appear to be something other than a mere support structure.

“Zoning Administrator” means the Administrator appointed pursuant to Section 8 in the Chassell Township Zoning Ordinance and/or their designee.

11.4 STANDARDS FOR ALL TOWERS:

The following standards shall be met before consideration by the Township of an application for a Wind Energy System, a Met or SCADA Tower, or Wireless Communication Tower.

1. Structural

The proposed tower will be structurally sound and constructed in accordance with all federal, state or local standards and otherwise capable of being used in accordance with the requirements of this section. The owner or operator shall inspect towers annually and the record of this annual inspection shall be submitted to the Zoning Administrator. In addition, an engineering inspection and certification will be required: when the tower is put into service; every five years thereafter or sooner as State/Federal regulations require; and whenever a structural change is made.

2. Spacing and Density.

A Tower System must be separated from every other Tower by a sufficient distance so it does not interfere with any other Tower. See also Setbacks in other Sections.

3. Height

All Towers over 75 feet tall will need a Permit. All Towers in Chassell Township over 200 feet will require a public hearing. Any tower and/or antenna placement in a Residential area shall not be erected at a height to require lighting. Towers under 75 feet will still require setbacks and noise restrictions etc. as outlined below.

4. Access

A Tower System, including any climbing aids, must be secured against unauthorized access by means of a locked barrier or security fence. The Zoning Administrator, or the Sheriff or Sheriff’s designee at the request of the Zoning Administrator, may enter any property for which a Permit has been issued under this Ordinance to conduct an inspection to determine whether there is any violation of this Ordinance, or whether the conditions stated in the Permit have been met.

5. Lighting.

Tower Systems other than a flag pole, may not be artificially lighted unless such lighting is required by the Federal Aviation Administration (FAA). If lighting is required, the lighting must comply with FAA minimum requirements and, whenever possible, be at the lowest intensity allowed, avoid the use of strobe or other intermittent white lights, and use steady red lights. If more than one lighting alternative is available, the alternative that causes the least visual disturbance must be used. All tower lighting required by the FAA shall be shielded to the extent possible to reduce glare and visibility from the ground.

6. Appearance, Color, and Finish.

The exterior surface of any visible components of a Tower System must be a non-reflective, neutral color.

7. Signs.

No wind turbine, Tower, building or other structure associated with a Tower System may be used to advertise or promote any product or service. No word or graphic representation, other than appropriate warning signs and owner or landowner identification, may be placed on a wind turbine, Tower, building, or other structure associated with the Tower System. One identification sign is required, measuring no more than thirty six (36) inches wide by thirty six (36) inches high, identifying the primary party responsible for the operation and maintenance of the facility, the address and telephone number of that party and, if appropriate, the FCC/FAA registration number of the structure shall be permanently attached to the fence, tower or wall of the ancillary building and can be read from a fence perimeter. The identity of the various carriers shall also be indicated on this sign. The only additional signs that may be permanently attached to the fence, tower or wall shall be security or safety signs. No advertising signs are allowed.

8. Code Compliance.

A Tower System must comply with all applicable federal, state, and local construction and electrical codes. A Tower System must comply with Federal Aviation Administration requirements, as well as State of Michigan Airport Zoning and Tall Structures Acts. The owner of a Commercial Tower system must provide written certification from a state licensed inspector showing that the Tower System complies with all applicable codes before placing the Tower System into operation. In addition, the Houghton County Airport Board shall approve the tower site plan and proposed Commercial tower for compliance height and lighting requirements dictated by the airport and FAA standards.

9. Environmental Impacts.

A Tower System shall comply with applicable parts of the State of Michigan Natural Resources and Environmental Protection Act, including but not limited to Water Resources Protection, Soil Erosion and Sedimentation Control, Inland Lakes and Streams, Shoreland Protection and Management, Great Lakes Submerged Lands and Sand Dunes Protection and Management.

10. Flicker or Shadow Flicker.

The owner of a Tower System must take such reasonable steps as are necessary to prevent, mitigate, and eliminate Flicker or Shadow Flicker on any occupied structure on a Nonparticipating Property.

11. Decommissioning.

When use of a tower or antenna has ceased for 365 continuous days, the property owner or user of the tower or antenna shall immediately notify the zoning administrator and supply the administrator with a written plan for the future usage and future maintenance of the grounds and structures.

The previous paragraphs shall govern all Towers over 75 feet in Chassell Township.

11.5 Zoning and Setbacks:

See separate sections for **Wind Energy Systems in Section 11.6** and **Wireless Communication Towers in Section 11.7**

11.6 WIND ENERGY SYSTEMS

STATEMENT OF FINDINGS:

Wind energy is an abundant, renewable, and nonpolluting energy resource. Wind energy's conversion to electricity reduces dependence on nonrenewable energy resources, enhances the reliability and power quality of the power grid, reduces peak power demands, and diversifies the energy supply portfolio.

1. Zoning and Setbacks

A Large Wind Energy System may only be located in areas in Chassell Township that are zoned Rural. A Small Wind Energy System may be located in all areas in Chassell Township except those that are zoned Office, Business or Urban Residential if it meets all other qualifications in this ordinance. Towers over 75 feet may only be located in a Rural Zone.

2. Wind Energy System Setbacks:

- a. At least 1.5 times its total height from the property line of a participating property; and
- b. At least 1.5 times its total height from any public road or power line right-of-way; and
- c. For Large Energy Wind Systems, at least 1,000 feet from the property line of a Nonparticipating Property, unless the owner of the Nonparticipating Property grants an easement for a lesser setback. The easement must be recorded with the Registrar of Deeds and may not provide a setback that is less than 1.5 times the total height of the Large Energy Wind System.
- d. For Towers under 75 feet, the distance between the tower and the owners property line shall be at least equal to the height of the tower, including any blade.
- e. No part of the tower structure, including guy wire anchors, may extend closer than ten feet to the owner's property lines, or the distance of the required setback in the respective zoning district, whichever results in the greater setback.

Exceptions to the above zoning and setback requirements may be requested by the Owner during the Application Process to the Zoning Administrator. Approval of adjacent affected private property owners will be required. Approval or denial of exceptions shall be at the sole discretion of the Township Planning Commission and/or Township Board.

3. Structure.

A Large Wind Energy System must be a monopole construction to the extent practical. If monopole construction is not practical, a Large Wind Energy System must be of free-standing construction to the extent practical. If monopole or free-standing construction is not practical, a Large Wind Energy System must be guyed.

4. Noise

The noise generated by the operation of any Wind Energy System shall not exceed 40dB(A) at the property line closest to the Wind Energy System. This sound level shall not be exceeded for more than three minutes in any hour of the day, except for short term events such as severe wind storms. Exceptions for neighboring property are allowed with the written consent of those property owners.

5. Blade Clearance for Energy Wind Systems

The vertical distance from ground level to the tip of a Large Wind Energy System wind generator blade when the blade is at its lowest point must be at least seventy-five (75) feet. The vertical distance from ground level to the tip of a Small Wind Energy System wind generator blade when the blade is at its lowest point must be at least twenty (20) feet.

6. Electrical Wires and Equipment

All electrical wires associated with a Large Wind Energy System, other than wires necessary to connect the wind turbine to its base and to overhead collection lines, must be located underground. Any electrical equipment associated with a Large Wind Energy System must be located under the sweep area of a blade assembly. All above ground lines, transformers, or conductors should comply with the Avian Power Line Interaction Committee APLIC published standards to prevent avian mortality.

7. Signal Interference.

The owner of a Wind Energy System must filter, ground, and shield the Tower, and take any other reasonable steps necessary to prevent, eliminate, or mitigate any interference with the transmission and reception of electromagnetic communications, such as microwave, radio, telephone, or television signals.

8. Utility Interconnection.

A Wind Energy System that connects to the electric utility grid must comply with the State of Michigan Public Service Commission and the Federal Energy Regulatory Commission standards and have the written permission from that local electric utility grid.

11.7 WIRELESS COMMUNICATION TOWERS

STATEMENT OF FINDINGS: Given the increase in the number of wireless communication facilities requested as a result of the new technology and the Federal Telecommunications Act of 1996, it is the policy of the township that all users should co-locate on Attached Wireless Communication Facilities and Wireless Communication Support Structures. Co-location is proposed in order to assure the most economic use of land and to prevent the proliferation of duplicative services.

1. Zoning and Setbacks

A Wireless Communication System over 75 feet tall may only be located in areas in Chassell Township that are zoned Rural.

A Wireless Communication Tower must be set back:

- a. At least a distance equal to the greater distance of: the Fall Zone for the tower proposed, or fifty percent (50%) of the height of the tower plus 50 feet from the property line of the participating property; and
- b. At least a distance equal to the greater distance of: the Fall Zone for the tower proposed, or fifty percent (50%) of the height of the tower plus 50 feet from any public road or power line right-of-way; and
- c. At least a distance equal to the greater distance of: the Fall Zone for the tower proposed, or fifty percent (50%) of the height of the tower plus 1,000 feet from the property line of a Nonparticipating Property, unless the owner of the Nonparticipating Property grants an easement for a lesser setback. The easement must be recorded with the Registrar of Deeds and may not provide a setback less than: a distance equal to the greater distance of: the Fall Zone for the tower proposed, or fifty percent (50%) of the height of the tower plus 50 feet.

The fall zone of the Tower system shall be certified by a State of Michigan licensed and registered professional engineer.

Exceptions to the above zoning and setback requirements may be requested by the Owner during the Application Process to the Zoning Administrator. Approval or denial of exceptions shall be at the sole discretion of the Township Planning Commission and Township Board.

2. Design Standards for a Wireless Communication Facility:

a. A permit for the construction and use of a new wireless communication facility shall not be granted until the applicant demonstrates in writing a feasible co-location is not available for the coverage area and capacity needs.

b. All new and modified wireless communication facilities shall be designed and constructed to accommodate at least four (4) antennae platform levels. Co-location terms, including rates, for compatible providers shall be included in the application. Terms shall be consistent with the market for the Western Upper Peninsula and without mandating the use of another entity's towers. In addition, applicants shall submit a signed statement agreeing to permit co-location consistent with those rental rates.

The owner and operator of a tower shall agree to permit other communication service providers, including local governmental agencies, to use the tower, upon these reasonable terms and conditions. This obligation shall not require the owner

or operator to permit access where doing so will interfere with the owner or operator's ability to provide or receive signals.

- c. The operator shall comply with applicable federal and state standards relative to the environmental effects of radio frequency emissions. All antennas on communication towers shall meet the electromagnetic exposure standards adopted by the Federal Communications Commission.
- d. The applicant shall demonstrate that the requested height of the new or modified support structure and antenna shall be the minimum height necessary for reasonable communication by the applicant, including additional height to accommodate future co-location where appropriate.
- e. A temporary antenna support facility may be used by a provider in any zoning district for the purpose of providing temporary wireless services for special short-term events such as a specific political event, sporting event, or entertainment event; to allow for modification, replacement, and/or repairs to a permanent facility; not to exceed one week, or as otherwise permitted by the Zoning Administrator, or as necessary to aid in post disaster relief efforts.

11.8 **APPLICATION PROCESS FOR ALL TOWERS OVER 75 FEET:**

Requests for a Tower System shall be submitted for review, approval, or denial in accordance with Section 8.2 Administration and Permit Procedure, Zoning Permits of the Chassell Township Zoning Ordinance, as appropriate and applicable. Requests shall be accompanied by payment of a fee as designated in the Township's Schedule of Fees and updated from time to time. In addition the Township's application fee, the applicant may be required to cover legal, professional, or expert assistance or consultant costs incurred by the Township in the review, approval or denial of a request for a Tower System.

If a Tower System Permit is granted, it will expire if the Tower System is not installed and functioning within two (2) years from the date the Permit is issued.

In addition to the information required in the aforementioned section, the applicant shall provide the following in writing:

1. The applicant and landowner's name and contact information. If the applicant is a business entity, the applicant shall provide the name of the business, certificate of incorporation (if applicable), certificate of good standing, and business tax ID number. The name, address and phone number of the person to contact for engineering, maintenance and other notice purposes. This information shall be continuously updated during all times the facility is on the premises.

2. Current property description (address, tax parcel numbers, legal description, and existing use and acreage of the site).
3. A survey map which clearly delineates with footage, the proposed location of the Tower System, existing or planned access roads, boundaries of the parcel, location of any overhead utility lines on or adjacent to the property, adjacent property ownerships and existing residences, schools, churches, hospitals, libraries, airports (public or private), any federal, state, county or local parks, recognized historic/heritage sites, inland lakes or streams, or shoreland, other towers or other structures to a distance one-half mile, and any proposal for landscaping and/or screening.
4. Number, description, design, and manufacturer's specifications of each Tower System, including the manufacturer, model, capacity, blade length, lighting, and total height of any Tower System.
5. Standard drawings or blueprints that have been approved by a registered professional engineer showing a cross section, elevation, and diagram for any Tower and Tower foundation, including a certification showing compliance with all applicable electrical (if Wind) and building codes.
6. A project visibility map based on an elevation model, showing the impact of topography upon visibility of the project from other locations, to a radius of three (3) miles from the center of the project. The applicant shall include with the application for special land use an analysis of the visual impact of the tower on the surrounding area. The analysis shall include point of view renderings of the tower in its proposed setting, with special attention given to adjacent residential uses, including any proposed landscaping.
7. Data pertaining to the Tower's safety and stability, including safety results from test facilities. Signed certification by a professional engineer licensed by the State of Michigan with regard to the manner in which the proposed structure will fall in the event of damage, accident or injury (i.e. A fall zone), and that the setback area provided shall accommodate the structure should it fall or break and provide a reasonable buffer in the event the structure fails.
8. The Township Board may request a completed environmental assessment, demonstrating compliance with applicable parts of the State of Michigan Natural Resources and Environmental Protection Act, including but not limited to Water Resources Protection, Soil Erosion and Sedimentation Control, Inland Lakes and Streams, Shoreland Protection and Management, Great Lakes Submerged Lands and Sand Dunes Protection and Management.
9. Statement describing any hazardous materials that will be used on the property, and how those materials will be stored.

10. Written documentation demonstrating compliance with all requirements set forth in Section 11 of the Chassell Township Tower Ordinance.

11. Written statement that the owner will construct and operate the Wireless Communication System, Wind Energy System, Met or SCADA Tower in compliance with all applicable local, state and federal codes, laws, orders, regulations, and rules.

12. Written statement that the owner will install and operate the Wireless Communication System, Wind Energy System, Met or SCADA Tower, in compliance with manufacturer's specifications.

13. Proof of financial assurance in form satisfactory to the Township that the applicant has the financial capacity to satisfactorily construct, install and meet all requirements set forth in this Ordinance for Tower Systems.

14. Written statement signed by the landowner acknowledging that the landowner is financially responsible if the owner fails to reclaim the site as required by this Tower Ordinance, and that any removal and reclamation costs incurred by the Township will become a lien on the property and may be collected from the landowner in the same manner as property taxes.

11.9 DECOMMISSIONING

A Wireless Communication system, Wind Energy System or Met or SCADA Tower that is out-of-service for a continuous period of 12 months, or is deemed unsafe or out-of-compliance with applicable federal, state or local codes or regulations, the Zoning Administrator may issue a Decommissioning Notice to the owner. If, within thirty (30) days of receipt of a Notice the owner provides the Zoning Administrator with information satisfactory to the Zoning Administrator that the Tower has not been abandoned, or is not unsafe or out-of-compliance with applicable federal, state or local codes or regulations, the Zoning Administrator will withdraw the Notice.

If the owner does not provide sufficient evidence that the Tower has not been abandoned, or is not unsafe or out-of-compliance, within 120 days of receipt of the Notice, the owner must cause the removal of the Tower and reclamation of the site. All foundations, pads, and underground electrical wires must be reclaimed to a depth of four (4) feet below the surface of the ground. All hazardous materials must be removed and disposed of in accordance with federal and state law. If the owner fails to cause the removal of the Tower within 120 days of the Notice, the cost of removal and reclamation will become a lien upon the property and may be collected in the same manner as property taxes.

11.10 ENFORCEMENT

The Zoning Administrator may enter any property for which a Permit has been issued under this Ordinance to conduct an inspection to determine whether there is any violation of this Ordinance, or whether the conditions stated in the Permit have been met. The

Zoning Administrator, or the Sheriff or Sheriff's designee at the request of the Zoning Administrator, may issue a citation for any violation of this Ordinance. Any person who fails to comply with any provision of this Ordinance or conditions stated in the Permit shall, upon conviction, shall be fined not less than \$500 nor more than \$1,000 for each offense, together with costs of prosecution for each violation.

11.11 PRECEDENCE

Any conflicts that may exist between this Section (Section 11 – Tower Ordinance) and any other sections of the Chassell Zoning Ordinance, this Section shall take precedence.