

**VILLAGE COUNCIL**  
**VILLAGE OF MACKINAW CITY**  
Cheboygan and Emmet Counties, Michigan

Trustee P. Michalak supported by Trustee E. Lieghio, moved the adoption of the following Ordinance:

**ORDINANCE NO. 214**

**AN ORDINANCE TO AMEND SECTIONS 36.004, 36.006, 36.008, 36.009, 36.010, 36.011, 36.013, 36.016 AND 36.017 OF THE COMPILED CODE OF THE VILLAGE OF MACKINAW CITY TO PROVIDE REGULATIONS FOR WIND ENERGY FACILITIES**

The Village of Mackinaw City ordains:

Sec. 1. Amendment of Compiled Code. Sections 36.004, 36.006, 36.008, 36.009, 36.010, 36.011, 36.013, 36.016 and 36.017 of the Compiled Code of the Village of Mackinaw City (Ord. No. 154, Effective August 4, 2010), are amended to read as follows:

Sec. 36.004. Regulatory Framework.

(1) Zoning.

- a. Large Wind Energy Facilities shall be permitted in all zoned areas subject to requirements in this Ordinance.
- b. Small wind energy facilities shall be considered a permitted use in all zoned areas subject to requirements in this Ordinance.
- c. MET Towers shall be considered a permitted use in all zoned areas subject to requirements in this Ordinance.

(2) Application for a permit for a large or small wind energy facility, and/or a MET Tower shall be submitted to the Village with the following information:

- a. The name, address, legal corporate status and telephone number of the applicant responsible for the accuracy of the application and site plan.
- b. The name, address, legal corporate status and telephone number of the owners of the proposed energy facility.
- c. A signed statement indicating that the applicant has legal authority to construct, operate, and develop the wind energy system(s) and MET Tower under state, federal and local laws and regulations, including Federal Aviation Administration (FAA), the Michigan Tall Structures Act (Act 259 of 1959), the Airport Zoning Act (Act 23 of 1950), and state and local building codes. The FAA will issue a signed statement when the precise location has been determined. Building permits will not be issued prior to receiving all signed statements, but a use permit may be granted.

- d. A description of the number and kind of wind energy system(s), and/or MET Tower(s), to be installed.
  - e. A description of the wind energy and/or MET Tower system(s)' height and design, including a cross section, elevation, and diagram of how the system will be anchored to the ground.
  - f. A site plan, drawn to a scale of not less than 1 inch = 40 feet if subject parcel is less than 3 acres; and not less than 1 inch to 100 feet if it is 3 acres or more. Site Plan shall provide required elements as identified in the Village of Mackinaw City Zoning Ordinance, Section 7-103. A professional sealed plan will be required for large wind energy facilities. Small wind energy facilities do not require a professional seal.
  - g. Photo exhibits visualizing the proposed wind energy system.
  - h. A statement from the applicant that all wind energy system(s), and/or MET Tower system(s), will be installed in compliance with manufacturer's specifications and a copy of those manufacturer's specifications.
  - i. A copy of the lease, or recorded document, with the landowner if applicant does not own the land for the proposed large or small wind energy facility(s). A statement from the landowner of the leased site that all applicable terms and conditions of the use permit, will be abided by, if approved.
  - j. A large wind energy facility shall provide a Shadow Flicker Analysis.
  - k. A copy of avian impact, if requested by the Village.
  - l. A copy of noise study, if requested by the Village.
  - m. A groundwater impact study relating to excavation and/or blasting during construction phase, if requested by the Village.
  - n. A statement indicating what hazardous materials will be used and stored on the site, and how those materials will be stored.
  - o. Towers shall not be lit except as required by FAA or the Michigan Tall Structures Act. A plan indicating how the large or small wind energy facility will be lit shall be provided if applicable.
- (3) A site grading, erosion control and stormwater drainage plan will be submitted to the Village prior to issuing a use permit for a Wind Energy Facility. At the Village's discretion, these plans may be reviewed by the Village's engineering firm. The cost of this review will be the responsibility of the applicant.
- (4) The applicant shall acquire all other permits, including permits for work done in rights-of-way prior to construction.
- (5) Wind energy systems and/or MET Tower(s) may not include offices, vehicle storage, or other outdoor storage. One accessory storage building may be permitted per wind turbine. The size and location of any proposed accessory building shall be shown on the site plan. No other structure or building is permitted unless used for the express purpose of the generation of electricity.

(6) An applicant may submit one use permit application for an entire large or small wind energy facility project located in the Village, provided that a detailed map identifying parcel locations for all proposed large and small wind turbines is provided to the Village at the time a use application is submitted.

(7) A certificate of insurance with a minimum of \$1,000,000 liability coverage per incidence, per occurrence shall be required for wind energy systems. Each renewal period will require a copy of certificate of insurance be provided to the Village. An expired insurance certificate or an unacceptable liability coverage amount is grounds for revocation of the use permit.

(8) Within (30) days after receipt of a permit application, the Village Zoning Administrator will determine whether the application is complete and advise the applicant accordingly.

(9) Within sixty (60) days of a completeness determination, the Village Planning Commission will schedule a public hearing. Notice for the hearing shall be provided in accordance with Section 9-107 of the Village Zoning Ordinance. The applicant may participate in the hearing and be afforded an opportunity to present the project to the public and municipal officials, and answer questions about the project. The public shall be afforded an opportunity to ask questions and provide comment on the proposed project.

After the public hearing, the Planning Commission shall issue a recommendation for its approval or disapproval and any conditions the Planning Commission feel should be imposed. Conditions or changes stipulated by the Planning Commission shall be recorded in the minutes of the meeting and made available to the applicant in writing. The recommendations of the Planning Commission shall be provided to the Village Council for their final decision.

The Village Council shall have the function and power to approve or disapprove all permit applications with such modifications and conditions as may be deemed necessary to carry out the purpose and intent of this Ordinance. The decision of the Village Council shall be incorporated into a written statement of findings and conclusions relative to the submitted application which specifies the basis for the decision and any condition(s) imposed.

(10) The Village will process a complete application within 120 days.

(11) Throughout the permit process, the applicant shall promptly notify the Village of any changes to the information contained in the permit application.

(12) Changes to the pending application that do not materially alter the initial site plan may be approved by the Village Council without renewed public hearing or additional Planning Commission review.

(13) A large and small wind energy facility authorized by use permit shall be started within twenty-four (24) months of use permit issuance and completed within thirty-six (36) months of use permit issuance, or in accordance with a timeline approved by the Planning Commission. Upon request of an applicant, and for good cause, the Planning Commission may grant an extension of time.

(14) The applicant shall submit a copy of all "as built plans" including structural engineering and electrical plans for all towers following construction to the Village to use

for removal of large and small wind energy facility, of [if] the large and small wind energy facility owner or its assigns fail to meet the requirements of this Ordinance.

(15) The Village Planning Commission reserves the right to review any use permits granted under this ordinance every five years to ensure that all conditions of the permit are being followed.

(16) If a large and small wind energy facility ownership changes, the new owner/operator must meet with the Planning Commission to review the conditions of the current use permit.

Sec. 36.006. General Requirements for Wind Energy Facilities.

(1) Principal or Accessory Use.

a. Wind energy systems may be considered either principal or accessory uses. A different existing use or an existing structure on the same lot shall not preclude the installation of a large or small wind energy facility or a part of such facility on such lot. Large and small wind energy facilities constructed and installed in accordance with the provisions of this ordinance shall not be deemed to constitute the expansion of a nonconforming use or structure.

b. A building permit, issued by the County Building Inspector shall be required for each individual wind turbine and/or MET Tower prior to construction of said wind turbine.

(2) Design and Installation.

a. Wind turbines and MET Tower(s) shall be painted a non-reflective, non-obtrusive color, such as grey, white, or off-white.

b. To the extent possible, applicants should use measures to reduce the visual impact of the wind energy facility (wind turbines with similar appearance; reasonable uniformity in overall size, geometry and rotational speeds).

c. At large and small wind energy facility sites, the design of the building and related structures shall, to the extent possible, use materials, colors, textures, screening, and landscaping that will blend the wind energy facility to the natural setting and existing environment.

d. Wind energy facilities shall not be artificially lighted, except to the extent required by the FAA and as required by the Michigan Tall Structures Act, as amended.

e. No form of advertising or decoration shall be allowed on the pole, turbine blades, hub, or other buildings or facilities associated with the use, except for reasonable identification of the manufacturer or operator of the large and small wind energy facility or MET Tower.

f. All wind energy facilities shall be equipped with a redundant braking/governor system. This includes both aerodynamic over speed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a failsafe mode. Stall regulation shall not be considered a sufficient braking system for over speed protection.

- g. To the extent applicable, the large and small wind energy facility shall comply with all applicable building codes and standards.
- h. Electrical controls, control wiring, and power lines shall be wireless or to the maximum extent practicable, be placed underground.
- i. All electrical components of the large and small wind energy facility shall conform to relevant and applicable local, state, and national codes, and relevant and applicable international standards.
- j. The owner of a large and small wind energy facility shall defend, indemnify, and hold harmless the Village and their officials from and against any and all claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses, and liabilities whatsoever including attorney fees arising out of the acts or omissions of the operator concerning the operation of the large and small wind energy facility without limitation, whether said liability is premised on contract or tort.
- k. The owner and/or applicant of the large and small wind energy facility shall reimburse the Village and/or County for any and all repairs and reconstruction to the public roads, culverts, and natural drainage ways resulting directly from the construction of the large and small wind energy facility. A qualified independent third party, agreed to by the Village and/or County and owner and/or applicant, and paid for by the owner and/or applicant, shall be hired to inspect the roadways to be used during construction. This third party shall be hired to evaluate, document, videotape, and rate road conditions prior to the construction of the large and small wind energy facility and again upon notification of completion of the large and small wind energy facility project. Any road damage done by the applicant or subcontractors shall be repaired or reconstructed at the applicant's expense. The Village may require a bond or cash escrow, held in trust in favor of the Village to recover the costs associated with the repair of roadways damaged by the construction of any turbines.
- l. Where large and small wind energy facility construction cuts through a private or public utility, the utility must be repaired to the satisfaction of the landowner and/or utility owner.
- m. Any recorded access easement across private lands to a large and small wind energy facility shall in addition to naming the owner as having access to the easement also name the Village as having access to the easement for purposes of inspection or decommission with 24 hours advance notice to the property owners and wind energy facility owner.
- n. Any wind energy turbine or facility that does not produce energy for a continuous period of twelve (12) months, excluding time spent on repairs or improvements, shall be considered abandoned and shall be removed in accordance with the removal provisions of this ordinance.
- o. The large and small wind energy facility owner and operator shall maintain a phone number and identify a responsible person for the public to contact with inquiries and complaints throughout the life of the project. This information will be supplied to the Village Clerk.

Sec. 36.008. Noise and Vibration.

(1) Audible noise due to wind energy facility operations shall not exceed 55 dBA for ten percent of the time over a continuous 24-hour period, when measured at any inhabited structure existing on the date of approval of a large and small wind energy facility building permit.

a. If audible noise exceeds 55 dBA for ten percent of the time over a continuous 24-hour period, the offending wind turbine must be made inoperable until repairs are completed.

b. The Village reserves the right to review the repair plan and evaluate its effectiveness.

(2) In the event the ambient noise level (exclusive of the development in question) exceeds the applicable standard given above, the applicable standard shall be adjusted so as to equal the ambient noise level. The ambient noise level shall be expressed in terms of the highest whole number sound pressure level in dBA, which is succeeded for more than five (5) minutes per hour. Ambient noise levels shall be measured at the exterior or [of] potentially affected inhabited structures. Ambient noise level measurement techniques shall employ all practical means of reducing the effect of wind-generated noise at the microphone. Ambient noise level measurements may be performed when wind velocities at the proposed project site are sufficient to allow Wind Turbine operation, provided that the wind velocity does not exceed thirty (30) mph at the ambient noise level measurement location.

(3) Any noise level emanating from a wind energy facility falling between two whole decibels shall be the lower of the two.

(4) The applicant or wind turbine facility owner shall pay for any noise monitoring or measurements, when reasonable need is determined by the Village..

Sec. 36.009. Minimum Ground Clearance.

The blade tip of any wind turbine shall, at its lowest point, have ground clearance of no less than twenty (20) feet.

Sec. 36.010. Signal Interference.

The applicant shall mitigate any interference with electromagnetic communications, such as, but not limited to, radio, telephone, or television signals, including any public agency radio systems, caused by any wind energy facility and/or MET Tower(s).

Sec. 36.011. Shadow Flicker.

(1) The applicant shall conduct an analysis on potential shadow flicker for a wind facility at occupied structures.

a. The analysis shall identify the locations of shadow flicker that may be caused by the project and the expected durations of the flicker at these locations from sunrise to sunset over the course of a year.

b. The analysis shall identify problem areas where shadow flicker may affect the occupants of inhabited structures and describe measures that shall be taken to eliminate or mitigate the problems.

(2) The applicant shall conduct an analysis on potential shadow flicker at public rights-of-way for wind systems.

a. The analysis shall identify the locations of shadow flicker that may be caused by the project and the expected durations of the flicker at these locations from sunrise to sunset over the course of a year.

b. The analysis shall identify problem areas where shadow flicker may affect the roads and other public rights-of-way and describe measures that shall be taken to eliminate or mitigate the problems.

(3) Any wind energy facility owner/operator shall make reasonable efforts to minimize or mitigate shadow flicker to any inhabited structure on non-participating landowner's property.

Sec. 36.013. Groundwater and Environmental Impact.

(1) The large and small wind energy facility owner/operator shall make reasonable efforts to minimize adverse impacts on water quality and soil erosion during the construction phase of the wind energy facility.

(2) The Village may require a groundwater impact study relating to excavation and/or blasting during the construction phase. (Such groundwater impact study will be paid at the owner/operator's expense.)

(3) If deemed necessary by the groundwater impact study, reasonable measures must be taken to mitigate or limit construction effects on groundwater.

Sec. 36.016. Decommissioning.

(1) All wind generators and appurtenances shall be removed from the site within twelve (12) months or 365 days of use termination notice to the Village by the owner of the facility or its assigns.

(2) The site shall be stabilized, graded, and cleared of any debris by the owner of the facility or its assigns. If site is not to be used for agricultural practices following removal, site shall be seeded to prevent soil erosion, unless the property owner requests in writing that the land surface areas not be restored.

(3) Any foundation shall be removed to a minimum depth of three (3) feet below grade, or to the level of the bedrock if less than three (3) feet below grade, by the owner of the facility or its assigns.

a. Following removal, the location of any remaining wind turbine foundation shall be identified on a map as such and recorded with the deed to the property with the Register of Deeds.

(4) Any access roads shall be removed, cleared, and graded by the owner of the large and small wind energy facility or its assigns, unless the property owner requests in writing a desire to maintain the access road. Ownership of any access road will not be assumed by the Village.

(5) Removal shall conform to the contract between property owner and the owner/operator of the large and small wind energy facility, in addition to the requirements set forth in this ordinance.

(6) The Owner and/or operator shall post and maintain decommissioning funds in an amount no less than twenty-five percent (25%) of decommissioning costs. The decommissioning funds shall be posted and maintained with a bonding company or Federal or State chartered lending institution chosen by the Owner and/or operator and participating landowner posting the financial security, provided that the bonding company or lending institution is authorized to conduct business within the State and is approved by the Village.

(7) Decommissioning funds may be in the form of a performance bond, surety bond, or other form of financial assurance as may be acceptable to the Village.

(8) The escrow agent shall release the decommissioning funds when the facility owner has demonstrated and the Village concurs that decommissioning has been satisfactorily completed, or upon written approval by the Village, in order to implement the decommissioning plan.

Sec. 36.017. Penalties.

(1) Any wind generation facility, turbine or appurtenant facility hereinafter significantly erected, moved or structurally altered in violation of the provisions of this Ordinance by any person, firm, association, corporation (including building contractors) or his or their agent shall be deemed an unlawful structure.

(2) Any wind generation facility that does not meet the requirements of this Ordinance, including, but not limited to, those dealing with noise or visual appearance, or does not meet the conditions attached to an approved use permit shall provide grounds for revocation of the use permit, thereby deeming the facility an unlawful structure.

(3) The Village may then refer the matter to the Village Attorney to bring action to enjoin the erection, moving or structural alteration of such facility or to cause such facility to be evacuated or removed.

(4) Any violation of this Ordinance shall be a misdemeanor punishable by a fine not exceeding \$500.00 and costs of prosecution or by imprisonment for a period not exceeding 90 days, or both, with such fine and imprisonment in the discretion of the court.

(5) This section shall not preclude the Village from maintaining any appropriate action to prevent or remove a violation of this section.

Sec. 2. Effective Date. This Ordinance shall take effect 20 days after its adoption, or upon publication, whichever occurs later.

Yeas: Trustees: J. Lemanski, P. Michalak, B. Mollen, E. Lieghio, S. Newman

Nays: Trustees: None

Abstain: Trustees: None

Absent: Trustees: T. Chastain and G. Ranville



Ordinance declared adopted.

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Scott Newman, Village President

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Lana Jaggi, Clerk

CERTIFICATION

As the Clerk of the Village of Mackinaw City, Michigan, I certify this is a true and complete copy of an ordinance adopted at a meeting of the Village Council held on March 7, 2019, with notice provided as required by law.

March 7, 2019

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Lana Jaggi, Clerk