

Utility Grid WECS, On Site WECS over 66 feet in height, and Anemometer Towers over 66 feet in height.

1. Such facilities are permitted by special use in the AG-1, AG-2 and AG-3 Districts.
2. In addition to the applicable information required by Article 11, the application shall include:
 - a. **The estimated construction timeline.**
 - b. Location of overhead electrical transmission or distribution lines.
 - c. Location and height of all buildings, structures, towers, security fencing and other above ground structures associated with the WECS.
 - d. Location and height of all adjacent buildings, structures, and above ground utilities located within ~~three~~ **six** hundred (~~300~~ **600**) feet of the proposed WECS or Anemometer Tower. Specific distances to other on-site buildings, structures, and utilities shall also be provided.
 - e. Existing and proposed setbacks of all structures located on the property.
 - f. Sketch elevation of the premises accurately depicting the proposed WECS and its relationship to all structures within ~~three~~ **six** hundred (~~300~~ **600**) feet. For wind farms in which case numerous WECS of similar height are planned, sketches are necessary only at borders of proposed project and when adjacent to other established structures within ~~three~~ **six** hundred (~~300~~ **600**) feet.
 - g. Access road to the WECS and Anemometer Tower with detail on dimensions, composition, and maintenance.
 - h. Planned security measures to prevent unauthorized trespass and access.
 - i. A copy of the manufacturer's installation instructions shall be provided. Included as part of or as an attachment to the installation instructions shall be standard drawings of the structural components of the wind energy conversion system and support structures, including base and footings provided along with engineering data and calculations to demonstrate compliance with the structural design provisions of the County Building Code; drawings and engineering calculations shall be certified by a registered engineer licensed to practice in the State of Michigan.
 - j. **A detailed description of the complaint resolution process developed by the applicant to resolve complaints from nearby residents concerning the construction or operation of the WECS. The process shall not preclude the County from acting on the complaint. During construction the applicant shall maintain and make available to nearby residents a telephone number where the project representative can be reached during normal business hours.**

- k. An analysis on potential shadow flicker at occupied structures. 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. ~~The analysis shall identify problem areas where shadow flicker may affect the occupants of the structures and describe measures that shall be taken to eliminate or mitigate the problems.~~ Wind Energy Conservation Systems shall be placed such that shadow flicker to any occupied buildings occurs no more than 30 hours per year.
- l. ~~A decommissioning plan that shall include the anticipated life of the project, the estimated decommissioning costs net of salvage value in current dollars, the method of ensuring that funds will be available for decommissioning and restoration and the anticipated manner in which the project will be decommissioned and the site restored.~~ The WECS application shall contain a Decommissioning Plan to ensure it is properly decommissioned upon the end of project life, inoperability of individual WECS turbine, or facility abandonment. Decommissioning shall include the removal of all structures, fencing and equipment, foundations, footings and debris to a depth of four (4) feet, as well as restoration of the soil and vegetation. The decommissioning including restoration shall be completed within one (1) year of the end of project life, inoperability of individual WECS turbine or facility abandonment. Extensions may be granted upon written request to the Planning Commission prior to expiration of the one (1) year decommissioning period. The Decommissioning Plan shall state (a) how the facility will be decommissioned, (b) the Professional Engineer's estimated cost of decommissioning, (c) the financial resources to be used to accomplish decommissioning, and (d) the escrow agent with which the resources shall be deposited. The Decommissioning Plan shall also include an agreement between the applicant and the County specifying that:
1. The financial resources for decommissioning shall be in the form of a surety bond or letter of credit, which shall be deposited in an escrow account with an escrow agent acceptable to the County.
 2. The County shall have access to the escrow account funds for the express purpose of completing the decommissioning, if decommissioning is not completed by the applicant within one (1) year of the end of project life, inoperability of individual WECS turbine, or facility abandonment, or upon expiration of any extension granted by the Planning Commission. Escrow funds may be used for administrative fees and costs associated with decommissioning.
 3. The County is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning as necessary.
 4. The County is also granted the right to seek and obtain injunctive relief to effect or complete decommissioning, as well as the right to collect reimbursement from applicant or applicant's successor for decommissioning costs in excess of the amount deposited in escrow and to file a lien against any

real estate owned by applicant or applicant's successor, or in which they have an interest, for the amount of the excess costs, and to take all steps allowed by law to enforce the lien.

3. WECS shall be exempt from the height requirements of this ordinance, subject to the provisions of Article 12 and compliance with all State and Federal regulations.
4. WECS and Anemometer Towers shall be setback from ~~the closest property line~~ non-participating property lines one (1) foot for every one (1) foot of tower height. This requirement may be modified by the planning commission if sufficient information is provided to reduce said setback.
5. WECS and Anemometer Towers shall be set back from the nearest public road a distance no less than 400 feet or 1.5 times its height to the hub, whichever is greater, determined at the nearest boundary of the underlying right-of-way for such public road.
6. WECS and Anemometer Towers shall be set back from the nearest railroad or rail trail a distance no less than 400 feet or 1.5 times its height to the hub, whichever is greater, determined at the nearest boundary of the underlying right-of-way for such railroad or rail trail.
7. WECS and Anemometer Towers shall be set back from the nearest residence, school, hospital, church or public library, or any other occupied buildings a distance no less than the greater of (a) two (2) times the hub height, or (b) one thousand (1,000) feet.
8. WECS and Anemometer Towers shall not be located within thirty (30) feet of an above ground utility line.
9. The minimum vertical blade tip clearance from grade shall be ~~20~~ 75 feet for a WECS employing a horizontal axis rotor.
10. WECS and Anemometer Towers shall comply with all applicable state construction and electrical codes and local building permit requirements. WECS and Anemometer Towers shall comply with Federal Aviation Administration requirements, the Michigan Airport Zoning Act (PA 23 of 1950), the Michigan Tall Structures Act (PA 259 of 1959) and any local jurisdiction airport overlay zone regulations.
11. WECS shall comply with all applicable parts of the Michigan Natural Resources and Environmental Protection Act (Public Act 451 of 1994, as amended).
12. WECS shall have automatic braking, governing, or a feathering system to prevent uncontrolled rotation or over speeding.
13. ~~WECS shall be grounded to protect against natural lightning strikes in conformance with the State Electrical code.~~
14. WECS and Anemometer Towers shall not have affixed or attached any lights, reflectors, flashers or any other illumination, except for illumination devices required by Federal

regulations. All required lighting shall be shielded to the extent possible to reduce glare and visibility from the ground.

15. WECS shall be of monopole design and shall not have guy wires.
16. If the Anemometer Tower is supported by guy wires, the wires shall be clearly visible to a height of at least six (6) feet above the guy wire anchors.
17. Noise emanating from the WECS shall not exceed 55 dB(A) at the ~~property line closest~~ **nearest habitable structure** to the WECS. 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).
18. Color and surface treatment of the WECS and supporting structures shall minimize disruption of the natural characteristics of the site. No lettering, company insignia, advertising or graphics shall be on any part of the tower, hub or blades of the WECS.
19. Each WECS shall have one sign posted at the base of the tower containing the following information:
 - a. Warning high voltage.
 - b. Manufacturer's name.
 - c. Emergency phone number.
 - d. Emergency shutdown procedures.
20. Signage placed at the road access shall be used to warn visitors about the potential danger of falling ice.
21. ~~WECS and Anemometer Towers shall be designed and constructed so as not to cause radio and television interference.~~ **No WECS and Anemometer Towers shall be installed in any location where its proximity with existing fixed broadcast, transmission, or reception antennas for television, radio, or wireless phone or other personal communications systems would produce electromagnetic interference with signal transmission or reception.**
- ~~22. No WECS shall produce vibrations humanly perceptible beyond the property on which it is located.~~
23. No WECS shall be interconnected with a local electric company until the utility company has reviewed and commented on it. The interconnection of the WECS with the utility company shall adhere to the State Electrical Code as adopted by the County.
24. The on-site electrical collection lines connecting the WECS to the public utility electricity distribution system shall be located underground: **where applicable. The interconnection of the WECS with the utility company shall adhere to the State Electrical Code.**

25. A change in location of a WECS and/or Anemometer Tower shall be approved by the Zoning Administrator provided the change in location is not more than one hundred (100) feet from the approved location and provided that the amended plans contain all information required in this Ordinance and the alternative location satisfies the conditions set forth in this section of the Ordinance.
26. An approved special use permit for a utility grid WECS project shall expire if construction of the WECS has not commenced within twenty-four (24) months from the date of issuance. An applicant may request an extension of the approval of the special use permit by letter addressed to the planning commission. The planning commission may grant an extension of up to eighteen (18) months for the construction to commence provided the written request to extend the special use permit is submitted prior to the expiration of the special use permit and provided that the proposed use continues to satisfy the applicable standards set forth within the ordinance.
27. An approved special use permit for a utility grid WECS and/or Anemometer Tower shall be deemed to constitute approval to operate and use the utility grid WECS and/or Anemometer Tower twenty four (24) hours per day.
28. The County hereby reserves the right upon issuing any WECS or Anemometer Tower special land use permit to inspect the premises on which the WECS is located. If a WECS is not maintained in operational condition and poses a potential safety hazard, the owner shall take expeditious action to correct the situation.

Add new Definition:

Non-participating Property Line: A property line of a parcel of property which is owned by a person(s) and/or entity(ies) other than a person(s) and/or entity(ies) which has authorized the use of their property for WECS and/or Anemometer Tower and/or which has authorized the use of their property for wind flow to a WECS and/or Anemometer Tower.