

MARION TOWNSHIP PLANNING COMMISSION AGENDA

SPECIAL MEETING December 10, 2024 7:30 PM

Virtual access instructions to participate in the meeting are posted on www.mariontownship.com

MEETING WILL BE HELD IN MAIN HALL

Call to Order:

Pledge of Allegiance:

Introduction of Members:

Approval of Agenda for: December 10, 2024 Regular Meeting

Approval of Minutes from:

Call for Public Comment:

Public Hearing:

New Business:

Unfinished Business:

- 1) TXT#03-24 Renewable energy review changes prior to public hearing

Special Orders:

Announcements:

Call for Public Comment:

Adjournment:

Marion Township Public Participation Policy

Section 1- Amendments to Article XVII Standards for Specific Special Land Uses

ARTICLE XVII STANDARDS FOR SPECIFIC SPECIAL LAND USES IS AMENDED BY THE AMENDMENT OF SECTION 17.35, WHICH SHALL READ AS FOLLOWS:

Section 17.37 Utility Solar Energy Facilities

A. Intent and Purpose: The intent and purpose of this section is to establish standards for the siting, installation, operation, repair, decommissioning, and removal of Utility Solar Energy Facilities; establish the process for the reviewing and permitting of such facilities; protect the health, welfare, safety, and quality of life of the general public; and ensure compatibility with land uses in the vicinity of the areas affected by such facilities.

B. Locational Requirements: Utility Solar Energy Facilities are subject to the locational requirements below.

1. Utility Solar Energy Facilities are permitted by special use permit in the SFO Solar Farm Overlay District.
2. The site may consist of a single participating property or multiple adjoining participating properties.
0. Spacing. : Utility Solar Energy Facilities shall be at least two thousand five hundred (2,500) feet from any adjacent, existing Utility Solar Energy Facility.

C. Site Requirements: Utility Solar Energy Facility sites shall meet the site standards below.

1. Site Composition: The site may consist of a single participating property or multiple adjoining participating properties. All participating properties must have signed agreements to participate in the Utility Solar Energy Facility.
2. Lot Area: The site shall have a total net lot area of ~~be~~ at least forty (40) acres and no more than one thousand (1000) acres.
3. Access: Utility Solar Energy Facilities shall meet the access standards below.
 - a) Road or Easement: ~~There shall be direct site, all fenced compounds, and every~~ solar array shall have direct access from a public road or an access easement with a maximum length of one thousand two hundred fifty (1,250) feet and width of at least thirty-three (33) feet.
 - a)b) Access Drive Material: Access drives shall have a hard surface or material that can pack hard that is sufficient to support fire apparatus and provide access at all times of the year.
 - b)c) Access Drive Maintenance: Access drives must be maintained and kept accessible at all times. The applicant, owner, operator, and property owners shall be jointly and severally responsible for maintenance of the access roads.
 - e)d) Access Drive Design: Access drives shall be designed to reduce the impact on agricultural use of the land and the visual impact. Access drives shall not impede the natural flow of water.
 - d)e) Gates and Doors: All access gates and doors to Utility Solar Energy Facility compounds and electrical equipment shall be lockable and kept secured at all times when service personnel are not present.

4. Setbacks: Solar panels, fenced compounds, and electrical equipment shall meet the setback standards below.

e)a) Measurement: Setbacks from solar panel arrays shall be measured horizontally from the edge of the array.

f)b) Fences and Improved Areas: All fences and improved areas shall comply with the applicable setback for the underlying zoning district in which it is located.

g)c) Fenced Compounds: All structures and improved areas located within the fenced compound shall be at least thirty (30) feet from the fence line.

d) Solar Energy Systems: Solar energy systems and related accessory structures shall meet the setbacks in the table below.

<u>Setback from</u>	<u>Distance</u>
<u>Non-participating property lines</u>	100 feet
<u>Occupied buildings on non-participating properties</u>	500 feet
<u>Occupied buildings on participating properties</u>	500 feet
<u>Lakes, rivers, creeks, and similar bodies of water and Wellhead Protection Areas</u>	100 feet
<u>Road rights-of-way</u>	100 feet

5. Height: Solar panel components must not exceed a maximum height of twenty-five (25) feet above ground when the arrays are at full tilt.

6. Lighting: Lighting shall be limited to inverter or substation locations only and shall comply with §14.04(E) Lighting.

7. Solar Arrays: Solar Arrays within a Utility Solar Energy Facility shall meet the design standards below.

a) Consistent: All solar arrays within the facility shall be of the same design and appearance.

b) Good Condition: All solar arrays shall be maintained in good condition at all times, consistent with or better than industry standards.

c) Certification: Solar array components shall be approved by the Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), International Electrotechnical Commission (IEC), or other similar certification organizations ~~if the similar certification organization is acceptable to the township.~~

8. Wiring: Underground Transmission. All power transmission, communication, or other lines, wires, or conduits within a Utility Solar Energy Facility shall meet the standards below. ~~from a Utility-Scale Wind Energy System to any building or other structure shall be located underground at a depth that complies with current National Electrical Code standards, except for power switchyards or the area within a substation.~~

- a) Stray Voltage: All ~~collection system~~ wiring shall comply with all applicable safety and stray voltage standards. Stray voltage originating from a Utility Solar Energy Facility shall not be detected on any participating or non-participating properties
- 1) Preconstruction Test: ~~Stray Voltage Assessments: No stray voltage originating from a Wind Energy System may be detected on any participating or non-participating property.~~ A preconstruction stray voltage test shall be conducted on all Michigan Department of Agriculture & Rural Development (MDARD) registered livestock facilities located within a one-mile radius of ~~the all~~ participating properties. The tests shall be performed by an investigator approved by the Township at the ~~applicant/owner's~~ applicant's expense.
- 2) Report: A report of the tests shall be provided to the owners of all property included in the study area.
- 3) Permission: The applicant/landowner shall seek written permission from ~~the~~ property owners prior to conducting testing ~~on such owners' property.~~ Applicants/landowners shall not be required to perform testing. Testing shall not be required on non-participating property properties where the owners have refused to grant permission to conduct the testing. The owner of any participating property included in the list of project parcels shall not refuse the stray voltage testing if they have a MDARD registered livestock facility on the participating property.
- b) Underground: Wiring shall be underground, except for power switchyards or the area within a fenced substation. When the Township finds underground wiring is not feasible due to soil or water conditions the above-ground lines, transformers, or conductors should follow any Avian Power Line Interaction Committee (APLIC, <http://www.aplic.org/>) guidelines to prevent avian mortality.
- c) Depth: Wiring shall be located at a depth to prevent any damage from freezing or frost, to prevent interference with drain tiles, and at a depth that complies with current National Electrical Code standards. All electrical connection systems and lines from the Wind Energy System Facility to the electrical grid connection shall be located and maintained a minimum of six (6) feet underground within and adjacent to the site.
- d) Interference: Wiring shall be located and designed to not cause interference with wired or wireless communication systems.
- e) Armoring: Concrete armoring techniques shall be used at every location where wiring crosses a county drain, river, water line, or sewer line.
- f) Marking: Permanent, visible markers or tracing wires shall be installed to indicate the location of wiring.
- g) Drain Tiles: Wiring shall be located to minimize conflict with drain tiles.
9. Drain Tiles: Drain tiles within the Utility Solar Energy Facility shall be preserved and maintained throughout the construction, operation, and restoration periods, as described below.
- a) Initial Inspection: ~~Prior to~~ Before the start of construction, ~~any all~~ existing drain tiles within the facility and within any disturbed areas must be inspected by robotic camera ~~and with~~ the imagery submitted to the ~~township~~ Township for baseline

documentation on tile conditions. Any damage shall be repaired, and a report submitted to the landowner and township. While the facility is in operation, the owner or operator must reinspect the drain tiles every three (3) years by robotic camera for any damage and must repair any damage within sixty (60) days of discovery. The owner or operator must report the inspection, along with any damage and repair, to the township within ninety (90) days after each three-year deadline. The township reserves the right to have the building inspector or other agent present at the time of repair. Wind Energy structure, structures, containers, cabinets and/or foundations shall be constructed to preserve any existing and new drainage field tile or system.

b) Continuing Inspection: Drain tiles must be reinspected by robotic camera every three (3) years while the facility is in operation or when conditions indicate there may be damage to drain tiles with the imagery submitted to the Township.

c) Repairs: Damage drain tiles shall be repaired within sixty (60) days of discovery. The Township shall be notified of any necessary repairs before the work commences and documentation of the repair work. Repairs necessary to address an emergency situation may be completed without prior notice to the Township.

d) Inspection: The Township reserves the right to have a Township official or other agent present at the time of repair.

10. Fire Suppression: A fire suppression system shall be provided that is specifically designed to immediately suppress and extinguish fires in any part of the Utility Solar Energy Facility, including the solar arrays, electrical equipment, and transformers.

a) Documentation: ~~The owner/operator shall provide documentation~~ Documentation shall be provided establishing confirming the effectiveness of the fire suppression system and the results of a third-party independent ~~inspection (approved by the Township) of inspection, as approved by the Township, of~~ the fire suppression system.

b) Fire Authority: The fire suppression system shall ~~also~~ be reviewed and approved by the ~~local fire department~~ Township's fire authority.

c) Annual Inspection: The fire suppression system shall be inspected and approved yearly by a third-party independent inspecting company that is approved by the Township.

11. Groundcover: Utility Solar Energy Facilities shall include the installation of perennial ground cover vegetation that shall be maintained for the duration of operation until the site is decommissioned where appropriate within the site.

a) PA 116 Lands: Land within the project area that are enrolled or bound by the Farmland Preservation Program must follow the Michigan Department of Agriculture and Rural Development (MDARD) Policy for Allowing Commercial Renewable Energy Development on PA 116 Lands.

b) Non-PA 116 Lands: Land within the project that are not enrolled or bound by the Farmland Preservation Program must provide at least one (1) of the following types of dual-dual-use ground cover to promote ecological benefits:

1) Pollinators: Pollinator habitat with a score of at least seventy-six (76) on the Michigan Pollinator Habitat Planning Scorecard for Solar Sites (www.pollinators.msu.edu);

- 2) Conservation Cover: Conservation cover focused on restoring native plants, grasses, or prairie with the aim of protecting specific species, such as bird habitat, or providing specific ecosystem services, such as carbon sequestration or improving soil health;
- 3) Grazing: Incorporation of rotational livestock grazing and forage production as part of an overall vegetative maintenance plan; or
- 4) Crops: Raising crops for food, fiber, or fuel and generating electricity within the site to maximize land use.

h)c) Alternative Ground Cover: The ~~township-Township~~ may approve or require alternative ground cover upon finding it is not feasible to provide groundcover as defined above.

i)d) Ground Cover Nature: All ground cover must be native plants with substantial root systems to support soil. Turf grass is not permitted as ground cover.

e) Invasives and Noxious: Invasive species and noxious weeds are not permitted and must be removed in a timely manner.

2.12. Fencing: Utility Solar Energy Facility compounds shall be completely surrounded by a fence designed to prevent unauthorized access and to screen the facility.

- a) Height: The fence shall be at least seven (7) feet tall.
- b) Fence Posts: Fence posts shall extend at least thirty-six (36) inches into the ground, and gate posts and corner posts shall have a concrete foundation.
- c) Fence Type: The fence shall be a woven agricultural-style fence. The Township may require or allow durable green opaque material to be integrated into the fence if necessary for buffering or screening.
- d) Gate Access: Gates shall be provided at all access points, unless otherwise permitted or approved. Gates for vehicular access shall be approved by the Fire Authority.
- e) Gate Type: Gates shall be the same height and constructed of the same material as the fencing. Access, such as Knox box, shall be provided for emergency responders.
- f) Wildlife Considerations: The ~~township-Township~~ may require or allow a fence design to allow for the passage of wildlife upon a finding that adequate access control and visual screening will be preserved.
- g) Alternate fencing may be approved by the ~~township-Township~~ upon a finding that the alternative provides adequate access control and visual screening.

13. Signage: Advertising or non-project related graphics shall be prohibited. This exclusion does not apply to signs required by this ~~ordinance~~Ordinance.

D. Buffering Requirements: Utility Solar Energy Facilities shall provide buffering described below.

1. Vegetative Buffer: There shall be a landscape buffer at least twenty (20) feet wide along the exterior of any fenced compound, whenever existing natural vegetation does not otherwise reasonably obscure the ~~Wind Energy System Facility, as described below~~fenced compound.

a) Design: The buffer shall ~~be installed to obscure Wind Energy System Facility and shall contain~~ have two (2) rows of staggered evergreen trees planted ~~not less than~~ twelve (12) feet apart ~~or less trunk-to-trunk, and, the~~ The two (2) rows shall be ten (10) feet apart. The ~~township~~ Township may consider an alternative landscape buffer as a part of ~~the Special Land Use~~ special use permit approval, provided the alternative buffer provides adequate screening.

b) Vegetation Size: Plantings shall be at least eight (8) feet tall at time of planting, measured from the top of the root ball to the base of the leader ~~(, not including the height of the leader)~~, and must be a species that can reasonably be expected to reach a height of ten (10) feet within three (3) growing seasons.

c) Maintenance: The trees may be trimmed but must maintain a height of at least eighteen (18) feet. ~~Damaged or diseased trees shall be shall be replaced at the next appropriate planting season.~~

d) Evergreen Species: Evergreen trees shall be Norway Spruce in ~~Row One~~ the row closest to fence. ~~Row Two shall be and~~ Thuja Green Giant Arborvitae ~~in the row away from the fence. The Township may consider alternative evergreen species as part of special use permit approval, provided the alternative species are more appropriate for the local conditions.~~

2. Buffer Maintenance: Good arboricultural techniques shall be followed with respect to vegetation, including, but not limited to, proper pruning, proper fertilizing, and proper mulching, so that the vegetation will reach maturity as soon as practical and will have maximum density in foliage. Dead or diseased vegetation shall be removed and must be replanted in a manner consistent with ~~this section~~ these standards at the next appropriate planting ~~time~~ season.

E. Performance Standards: Utility Solar Energy Facilities shall meet the performance standards below.

1. Compliance: Utility Solar Energy Facilities shall be designed, constructed, operated, and maintained in compliance with all applicable provisions of local, state, and federal laws and regulations and industry standards.

3.2. Noise/Sound: The ~~noise sound~~ generated by a Utility Solar Energy Facilities must ~~meet the sound standards of this Ordinance and the additional standards below.~~ not exceed the following limits

a) Day Sound Level: The maximum sound level shall be ~~Forty~~ forty (40) Dba Lmax, as measured at the ~~lot line of the project property~~ project boundary and road rights-of-way, between the hours of 7:00 am and 9:00 pm.

b) Night Sound Level: The maximum sound level shall be ~~Thirty~~ thirty-five (35) Dba Lmax, as measured at the ~~lot line of the project property~~ project boundary and road rights-of-way between the hours of 9:00 pm and 7:00 am.

c) Pure Tone: If pure tones are produced, the maximum sound level shall be reduced by five (5) Dba.

e)d) Ambient Sound: If the ambient sound levels exceed these standards, the maximum sound level shall be the ambient sound level plus five (5) Dba.

d)e) Inverter Sound Screening: ~~In addition to the above limitations, a~~ A sound barrier of a solid decorative masonry wall or evergreen tree berm, with trees spaced not less than ten (10) feet apart, must be constructed to reduce noise levels surrounding all inverters. ~~The berm~~ Berms must be ~~no more than within~~ ten (10) feet ~~from of~~ all inverters and, must be at least as tall as all inverters, but ~~cannot be~~ cannot be more than three (3) feet taller than the height of ~~all the adjacent~~ inverters.

f) Continued Compliance: The ~~noise sound~~ level by a Utility Solar Energy Facility must be inspected every three (3) years, at the operator's expense, by an auditory expert to ensure compliance with ~~applicable these noise requirements~~ sound standards.

4.3. Airport Review Impact: ~~Any Utility~~ System Facilities must be reviewed using the current Solar Glare Hazard Analysis Tool (SGHAT) available through Sandia National Laboratories or a commercially-available equivalent. The SGHAT will be used to ensure that airports and those who use them will not be affected by unwanted visual or ocular impacts. The process is designed to save costs and increase public safety.

a) Adverse Impacts: The study shall determine if there are any potential adverse effects on any registered airfield within ten (10) miles of the project. Effects noted, but not exclusively, should include any possible decreased safety and utility.

b) Determination of No Hazard: ~~In addition, all proposed solar facilities~~ Utility Solar Energy Facilities must obtain a Determination of No Hazard (~~DNH~~) from the Federal Aviation Administration (~~FAA~~). A DNH-Determination of No Hazard does not eliminate the need for the SGHAT study, nor does it in any way eliminate the standard for glare on roadways or non-participating parcels.

c) Timing: The ~~DNH-Determination of No Hazard~~ must be obtained ~~prior to before~~ breaking ground on any portion of the Utility Solar Energy System Facility. A copy must be submitted to the Township.

d) Safety and Utility Impacts: ~~No Solar Energy System~~ Utility Solar Energy Facilities that impacts safety or utility of any registered airfield shall not be permitted.

5.4. Reports: In addition to other reports identified in this Ordinance, the owner or operation shall submit the following reports during the operation of Utility Solar Energy Facilities.

a) Annual Report: An annual report shall be provided to the zoning administrator showing continuity of operation.

b) Operation. A report shall be provided to the zoning administrator if the Utility Solar Energy Facility or any of its components are no longer being used. ~~and shall notify the zoning administrator if use is to cease, prior to decommissioning, or abandonment.~~

c) Incident Report: Reports shall be submitted if there is a major incident at the Utility Solar Energy Facility that did or could have caused harm to life or property, including calls for service from emergency responders. The report shall identify the cause of the incident and corrective action to prevent future incidents of that nature.

5. Safety: Utility Solar Energy Facilities shall be subject to the safety standards below.

- a) Warning Signs: The manufacturer's or installer's identification and appropriate warning signs shall be posted on or near each solar array and electrical equipment in a clearly visible manner.
 - b) Fire Suppression and Data Sheets: Fire suppression plans and Safety Data Sheets shall be kept onsite and be accessible for emergency responders.
 - c) Safety Manual: ~~The applicant will provide an~~ An unredacted copy of the manufacturer's safety manual for each component of the Utility Solar Energy Facility, without distribution restraints, will be provided before construction commences. ~~These will~~ to be kept at the Township Hall and other locations deemed necessary by Planning Commission ~~the Township~~ or local first responders. The manual should include standard details for an industrial site such as materials, chemicals, fire, access, safe distances during a Utility Solar Energy Facility failure, processes in emergencies, etc.
6. Interference: Utility Solar Energy Facilities must not interfere with any radio, television, or other communication systems. ~~If the Township or the applicant or operator of the Utility Solar Energy Facility receive a complaint about communication interference,~~ The applicant or operator must resolve the any known interference immediately and provide proof that the interference has been resolved within ninety (90) days.
7. Complaint Resolution: Utility Solar Energy Facilities shall provide a complaint resolution process, as described below.
- e)a) Signs: ~~The site shall have~~ Signs posted with contact information to collect report complaints related to the Utility Solar Energy Facility shall be posted throughout the project area. Signs shall be posted before construction begins and maintained until decommissioning is complete.
 - b) Resolution Options: Any resolution shall include lawful and reasonable solutions consistent with ~~the zoning~~ this ordinance ~~Ordinance, which shall also be provided to the zoning administrator.~~
 - c) Contact: A twenty-four hour (24) hour, toll free number shall be established the owner or operator to receive complaints. Additional reporting methods, such as postal mail or electronic mail, may also be used.
 - d) Log: A log shall be kept by the owner or operator of all complaints received and documentation of the resolution. The log shall be available to the township officials for review, ~~per township request by Township Officials.~~
 - d)e) Notification: The zoning administrator shall receive notification of all complaints received. An annual report shall be submitted to the ~~zoning administrator and the township board~~ Township that details all complaints received, the status of complaint resolution, and actions taken to ~~mitigate~~ resolve complaints.
 - e)f) Resolution Period: Complaints for hazardous conditions shall be resolved within twelve (12) hours or as soon as reasonable possible. The operator or its agent shall respond to ~~Other~~ complainants shall be resolved within ten (10) business days and shall provide notification to the zoning administrator. The zoning administrator shall receive notification of all complaints received.
 - g) Adjudication: The operator or its assigns reserve the right to adjudicate any claims, including residential claims, in a court of competent jurisdiction.

8. Insurance and Performance Guarantees: Utility Solar Energy Facilities shall provide insurance and performance guarantees. These are in addition to other insurance or performance guarantees required by this Ordinance or other entities.

a) General Liability Insurance: Utility Solar Energy Facilities shall have and maintain general liability insurance of at least ten million (\$10,000,000) dollars. The township Township may require a higher amount for larger projects and may allow for a lesser amount for smaller projects upon a finding that the alternate amount is more consistent with the likely risk.

b) General Maintenance Bond Performance Guarantee: ~~The township shall require a~~ General Maintenance ~~Bond Performance Guarantee shall be provided before~~ construction commences to guarantee all aspects of this ~~ordinance~~ Ordinance are met at all times during the construction and operation of the Utility Solar Energy Facility. At the time of the ~~Special Use~~ application, the applicant shall submit two (2) third-party contractor bids for construction of all fencing, landscaping, and drainage improvements associated with the Utility Solar Energy Facility, and the ~~bond~~ performance guarantee shall be the higher of the two (2) bids. The ~~township~~ Township may use the ~~bond performance guarantee~~ to repair any landscaping, fencing, drainage infrastructure (including drainage tiles), and/or to correct any ongoing violation of this ~~ordinance~~ Ordinance in the event that the ~~site improvements for the~~ Utility Solar Energy Facility ~~owner fails to adequately is not maintained the required site improvements, or the~~ Utility Solar Energy Facility fails to make operational changes to correct an operational violation.

c) Road Performance Guarantee: ~~In addition, in order to assure the funds will be available to perform all road repairs required under this ordinance, the applicant will be required to post financial security acceptable to the township, in the form of A road performance guarantee shall be provided before construction comments in a form acceptable to the Township, such as:~~ a) a surety bond from a surety listed as acceptable on the Federal Surety Bond circular 570 of the U.S. Department of Treasury; or b) an acceptable ~~irrevocable~~ letter of credit; or c) an escrow account established in a financial institution licensed in the State of Michigan. ~~A construction bond shall not be accepted.~~ The amount of the ~~security performance guarantee~~ shall be ~~a minimum of at least~~ one million two hundred fifty thousand dollars (\$1,250,000), but this amount may be increased if the third-party consultant determines the amount needed for road repairs is greater than this amount. ~~The bond (or other security) performance guarantee shall only be released (, in whole or part), when the Township Board, in consultation with the LCRC-Livingston County Road Commission and Michigan Department of Transportation, as applicable, and the third-party inspector, determines that all required road work has been completed and approved by LCRC and/or MDOT the affected road agencies. The Township may waive the requirement for this performance guarantee if the road agencies collect a performance guarantee.~~

d) Complaint Inspection Escrow: An escrow account, funded by the applicant, owner, or operator, to be used for investigation of complaints shall established before construction commences. ~~The applicant shall be required, as a condition of the operation, to fund an escrow account for~~ The escrow account shall be used by the Township for investigation of complaints, including reasonable reimbursement of qualified third-party agents, for, but not limited to, glare, stray voltage, ~~noisesound~~, and signal interference ~~in the amount of \$15,000 to be used at the discretion of the~~

~~Township Board to pay for third-party investigative services, the provider of which shall be chosen by the township. Such funds shall be deposited with the~~ The escrow account shall be kept with the Township Treasurer, or with a third-party fiduciary, at the discretion of the township. The initial escrow account shall be in the amount of fifteen thousand dollars (\$15,000). When the escrow account balance is below five thousand dollars (\$5,000), the ~~township~~ Township shall notify the applicant responsible party, who must ~~and the applicant shall~~ replenish the escrow account to the amount of fifteen thousand (\$15,000) within a period of forty-five (45) calendar days.

6.9. Dust Control: Reasonable dust control measures shall be taken during construction and operation.

10. Plants and Grasses: Plants or grasses not part of the buffer area shall be maintained ~~not to exceed~~ at a height of twelve (12) inches or less. The ~~township~~ Township may approve a taller height upon a finding that it will not result in a nuisance.

11. Wildlife: Utility Solar Energy Facilities shall be designed, sited, and operated in a manner to minimize impact on wildlife.

a) Wildlife Impact Analysis: The applicant shall have a third-party qualified professional, acceptable to the ~~T~~Township, conduct an analysis to identify and assess any potential impacts on wildlife and endangered species. At a minimum, the analysis shall include a thorough review of existing information regarding species and potential habitats in the vicinity of the project area. Where appropriate, surveys for bats, raptors, or general avian use should be conducted. The analysis shall include the potential effects on species listed under the federal Endangered Species Act and Michigan's Endangered Species Protection Law.

b) Adverse Impacts: ~~The applicant shall take appropriate~~ Appropriate measures shall be taken to minimize, eliminate, or mitigate adverse impacts identified in the analysis. The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.

a)c) Special Scrutiny: Sites requiring special scrutiny include wildlife refuges, other areas where birds are highly concentrated, bat hibernacula, wooded ridge tops that attract wildlife, sites that are frequented by federally- or state-listed endangered species of birds and bats, significant bird migration pathways, and areas that have landscape features known to attract large numbers of raptors.

d) US Fish and Wildlife Service. ~~At a minimum, the analysis shall include a thorough review of existing information regarding species and potential habitats in the vicinity of the project area. Where appropriate, surveys for bats, raptors, or general avian use should be conducted. The analysis shall include the potential effects on species listed under the federal Endangered Species Act and Michigan's Endangered Species Protection Law.~~ The applicant shall follow all pre-construction and post-construction recommendations of the United States Fish and Wildlife Service.

e) Post-Construction Mortality Study: ~~The analysis shall indicate whether a~~ A post-construction wildlife mortality study will be conducted and may be required. The analysis should indicate if such a study is determined unnecessary and, if not, the reasons why such a study does not need to be conducted. Power lines should be placed underground, when feasible, to prevent avian collisions and electrocutions. ~~All above-ground lines, transformers, or conductors should follow any Avian Power Line~~

Interaction Committee (APLIC, <http://www.aplic.org/>) guidelines to prevent avian mortality.

12. Environment: Utility Solar Energy Facilities shall be designed, sited, and operated to minimize impact on the environment.

- b)a) Environmental Impact Analysis:** The applicant shall have a third-party qualified professional, acceptable to the ~~township~~ Township, conduct an analysis to identify and assess any potential impacts on the natural environment including, but not limited to, wetlands and other fragile ecosystems, historical and cultural sites, and antiquities.
- e)b) Adverse Impacts:** ~~The applicant shall take appropriate~~ Appropriate measures shall be taken to minimize, eliminate, or mitigate adverse impacts identified in the analysis. The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.
- c) Environmental Laws:** ~~The applicant~~ Utility Solar Energy Facilities shall comply with applicable parts of the Michigan Natural Resources and Environmental protection Act (Act 451 of 1994, MCL 324.101 et seq.), Part 91 Soil Erosion and Sedimentation Control (MCL 324.9101 et seq.), Part 301 Inland Lakes and Streams (MCL 324.30101 et seq.), Part 303 Wetlands (MCL 324.30301 et seq.), Part 323 Shoreland Protection and Management (MCL 324.32301 et seq.), Part 325 Great Lakes Submerged Lands (MCL 324.32501 et seq.), and Part 353 Sand Dunes Protection and Management (MCL 324.35301 et seq.).
- d) Containment System:** A containment system shall surround any transformers in case of hazardous waste or oil spills.
- d)e) Removal:** All solid and hazardous waste materials shall be promptly removed from the site and disposed of properly.
- f) Responsibility:** The Utility Solar Energy Facility owner, operator, and property owner shall be responsible, jointly and severally, for mitigating erosion, flooding, and all other environmental impacts resulting from the Facility.

13. Emergency Action Plan: Utility Solar Energy Facilities shall have a Copy of a plan for the shall have an Emergency Action Plan to identify actions to be taken in event of an emergency.

- a) Fire Suppression:** The ~~emergency-Emergency action-Action plan-Plan~~ must include a fire suppression plan, including the technology to be used and the training and equipment to be provided to ~~township~~ Township or other firefighters before the facility becomes operational.
- b) Special Equipment and Training:** The Emergency Action Plan shall identify special equipment and training that is required for emergency response to the Utility Solar Energy Facility.
- e)c) Clean-up:** The emergency action plan must include plans for immediate cleanup and long-term aftermath efforts following an emergency.
- d) ~~Emergency Action Plan and~~ Emergency Training-:** Before the The Utility Solar Energy Facility is operational, it must provide the necessary training, equipment, or agreements specified in the ~~application~~ Emergency Action Plan to ~~township~~ the

Township or other emergency personnel. All training must be consistent with current industry standards.

e) Public Record: The ~~emergency~~Emergency Action plan~~Plan~~ will be a public record.

F. General Provisions: Utility Solar Energy Facilities shall be subject to the general provisions below.

1. Damage Repair: The Utility Solar Energy Facility owner, operator, and property owner shall be responsible, jointly and severally, for making repairs to any public roads, drains, and infrastructure damaged by the construction of, use of, maintenance of, or damage to, a The Utility Solar Energy Facility. ~~Any battery, battery structure, or battery component damaged beyond repair or use must be removed from the project site within five (5) days and must be disposed of off-site in accordance with any state or federal requirements. All battery installation or structures shall conform to the regulations outlined in Section 17.38, Utility-Scale Battery Energy Storage Systems.~~
2. Mixed Facilities: Utility Solar Energy Facilities may be collocated with other renewable energy facilities, such and Utility Battery Energy Storage Facilities or Utility Wind Energy Conversion Facilities. Review and approval are required for each use.
3. As-Builts: The ~~owner/operator~~applicant shall submit an as-built drawing with dimensions relative to property lines of all new structures including turbines and buried cable both inside and outside fenced areas upon completion and before any power is supplied to the grid. The as-built drawing shall be a scale of 1" = 200 feet.
- 7.4. Repowering or Modifications: - Any modifications of an approved site plan or special use permit that are made after the initial date of approval, including, but not limited to, an expansion of project, repowering, reconfiguration, technological updates, ~~shall be resubmitted to the Township Planning Commission for review at an additional fee based upon current fee schedule shall require new site plan and special use permit applications.~~ Any changes of the approved site plan or special use permit, ~~will be~~ subject to this ~~ordinance~~Ordinance as it exists at time of this new application, ~~will require a new site plan application and review, including reconfiguration of arrays, updating current technology, and Utility Scaled Battery Energy Storage Facility infrastructure.~~
5. Transfer or Sale: In the event of a transfer or sale of ~~the a~~ Utility Solar Energy Facility, the new owner or operator must notify the ~~township~~Township within thirty (30) days, and the zoning administrator shall administratively amend the permit to name the new owner or operator. Upon transfer or sale, the cash bond shall be transferred to the new owner or operator and shall be maintained at all times, the estimated costs of decommissioning shall be resubmitted, and the security bond adjusted to account for the new estimate.

G. Decommissioning, Abandonment, and Restoration: Following the operational life or abandonment of a Utility Solar Energy Facility, ~~of the project, the applicant shall perform decommissioning and removal of the Wind Energy System Facility and all of its components and restore the site to its original condition~~the site shall be decommissioned and restored as outlined below.

1. Decommissioning Plan: The applicant shall have a third-party qualified professional, acceptable to the Township, prepare a decommissioning plan. The decommissioning plan shall be written to provide security to the township for one hundred twenty-five percent (125%) of the cost to remove and dispose of all panels, wiring, and restoration of

the land to its original conditions. ~~The value of decommissioning shall be determined by a third-party financial consultant or engineer selected by the township and paid for by the developer.~~ The decommissioning security shall be paid in cash to the Township. Once value of decommissioning is determined, it shall be updated on a periodic basis of not less than every three (3) years and additional security may be required on the basis of the average inflation rate of the preceding three (3) years.

a) Anticipated Life: The decommissioning plan shall describe the anticipated life span of the Utility Solar Energy Facility and its components.

b) Decommissioning Costs: The decommissioning plan shall provide a probable cost estimate for decommissioning, including current cost and cost at the time of decommissioning.

c) How Paid: The decommissioning plan shall provide a description of how decommissioning costs will be paid.

d) Regular Updating: The decommissioning plan shall be updated on a regular, period basis at of at least once every three (3) years.

8.2. Abandonment: Utility Solar Energy Facilities or any components that are not operated for a continuous period of ~~twelve (12)~~six (6) months shall be considered abandoned ~~and shall be subject to removal proceedings, whether or not there is an intent to continue the use, and shall be removed or restored to operation.~~

3. Damage: Any Utility Solar Energy Facility components that are damaged shall be replaced or removed within seven (7) days. An extension may be granted by the Township upon finding that it is not feasible to replace or remove the component in that period and that the delay does not create a hazardous condition.

9.4. Unsafe: Any unsafe components shall be removed or made safe within a reasonable period as determined by the Township.

10.5. Compaction Prevention: All abandonment and decommissioning work must be done when soil is dry or frozen to prevent compaction.

6. Chemical Analysis and Boring: A chemical analysis and boring of the soil, as recommended by the ~~township~~Township engineer shall be performed ~~prior to~~before any decommissioning work begins ~~and with~~ the results compared to the baseline soil chemical analysis baseline test results obtained ~~prior to~~before construction of the Utility Solar Energy Facility.

a) Chemical Levels: All levels of any chemical entity found in the soil chemical analysis must be equal to or are lower than the levels of all chemical entities determined in the baseline testing performed prior to construction. If a new chemical entity, either organic or inorganic compounds, are identified in the soil chemical analysis, its level must be below established federal and state government levels for hazardous materials in soils for that chemical entity.

b) Report: A report of the soil chemical analysis must be provided to the Township within seven (7) days. If any chemical entity, organic or inorganic compounds, are above the baseline levels determined prior to construction of the Wind Energy System and if any new chemical entity, organic or inorganic, are identified and their levels are above established federal and state government levels for hazardous materials in soils, ~~the owner/operator must~~the report ~~the results to the Township~~

and must be submitted to the appropriate Federal and State regulatory agencies within seven (7) days of receiving the testing report showing a violation.

- c) Violation Mitigation: Once a violation has been determined and finalized, a reclamation plan for the contaminated soil must be developed and implemented to remove the contaminated soil from the Utility Solar Energy Facility site. The reclamation plan must meet all Federal and State regulations for the reclamation of a contaminated site. The plan must be approved by the ~~township-Township~~ Board of ~~Trustees~~ and the ~~township-Township~~ engineer. Once the contaminated soil has been removed and replaced with uncontaminated soil, a final soil chemical analysis shall be performed to confirm the Utility Solar Energy Facility site soils has have been returned to its original state for levels of organic and inorganic compounds prior to construction of the Wind Energy System Facility that existed before construction.
- d) Cation Exchange Capacity. A Cation Exchange Capacity soil test shall also be required at the completion of the decommission process.
- e) Violation Mitigation 2: Any negative variations from the preconstruction soil testing must be remedied and the final results of the testing approved by the township engineer and the ~~township-Township~~ Board of ~~Trustees~~.

11.7. Ground Restoration: The ground must be restored to its original topography and land must be restored to a depth of three (3) feet below grade within three hundred sixty-five (365) days of abandonment or decommissioning. An extension may be granted by the Township if a good faith effort has been demonstrated and any delay is not the result of actions or inaction of the operator. An alternative topography can be approved by the township-Township as part of the original site plan review or later as part of decommissioning.

8. Land Balancing: If land balancing is required, all top soil will be saved and spread evenly over balanced area.

12.9. Township Action: The Township may remove any abandoned or unsafe Utility Solar Energy Facility components that are not removed or restored within the allowed time. The owner, operator, and property owner shall be jointly and severally responsible for any costs.

10. Attorney Costs: The applicant-owner, operator, and property owner shall be responsible for the payment of all attorney fees and other costs incurred by the ~~township-Township~~ in the event that the ~~structure is not voluntarily removed and the township-Township~~ has to enforce removal.

11. Vegetation: Disturbed land shall be revegetated at the next appropriate planting season.

12. Disposal: All structures, equipment, and waste shall be removed from the site and disposed of properly.

H. Application Materials: Applications for Utility Solar Energy Facilities must submit the following additional materials with the Special Land Use Application. These are in addition to information required for site plan and special use permit applications.

13.1. Identification: Applicant's-The name and address in full of the applicant, developer, owner, operator and property owners, a statement that the applicant is the owner involved in the application (substitution may include a legal description or parcel identification number(s)), any lease agreements, easements. Or purchase agreements

for the subject parcels, and any additional contact information shall be submitted. Each application for a Utility Solar Energy Facility shall also be dated to indicate the date the application is submitted to Marion Township.

- 44.2. Purchase Agreements or Leases: Copies of all purchase agreements or leases for all participating properties that confirm~~An affidavit or evidence of an agreement between the lot owner or operator confirming the owner or operator applicant~~ has the permission of the participating property owners to apply for the necessary approvals and permits for construction and operation of a Utility Solar Energy Facility.
3. Project Description: A general description of the proposed project~~including a legal description of the property or properties on which the project would be located and an anticipated construction schedule, including name-plate generating capacity and an anticipated construction schedule shall be submitted.~~
- 14.4. Solar Arrays: A complete description of the proposed technology to include type of solar panel and system, maximum height, fixed mounted versus tracking, number of panels, and angles of orientation.
- 14.5. Conceptual Plan: A graphical computer-generated depiction of how the Utility Solar Energy Facility will appear from all directionsshall be submitted.
6. Documentation: A complete set of photos and video of the entire development area~~prior to construction as it exists before the application date.~~
7. Operation: A Description~~description~~ of operations, including anticipated regular and unscheduled maintenance and the hours of the day maintenance will take place shall be submitted.
8. Power Purchase Agreement: A copy of the applicant's power purchase agreement or other written agreement with an electric utility showing approval of an interconnection with the proposed Utility Solar Energy Facility shall be submitted.
- 17.9. Insurance: Proof of the general liability insurance to cover the Utility Solar Energy Facility, the Township, and the~~landowner~~participating property owners shall be submitted.
10. Certifications: Certification shall be submitted that applicant~~the~~ Utility Solar Energy Facility will comply with all applicable state and federal laws and regulations in effect at the time the application is submitted, including, but not limited to: Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act; (MCL 324.3101 et. seq.; Part 91, Soil Erosion and Sedimentation Control (MCL 324.9101 et. seq.) and any corresponding County ordinances; Part 301, Inland Lakes and Streams, (MCL 324.30101 et. seq.); Part 303, Wetlands (MCL 324.30301 et. seq.); and Part 365, Endangered Species Protection (MCL 324.36501 et. seq.).
11. Farmland Preservation Approval: Land~~Utility Solar Energy Facilities with any participating properties that are~~ enrolled in the Michigan Farmland Preservation program must provide confirmation of approval from the Michigan Department of Agriculture to locate ~~a Wind Energy System Facility on the property before issuance of a certificate of zoning compliance~~the facility on the property.
12. Road Agencies: The applicant must also obtain a permit from the Livingston County Road Commission (LCRC) or Michigan Department of Transportation (MDOT) for permission to connect access roads to existing County roads and from the Livingston

- ~~County Drain Commission (LDCD) for any culverts or other drainage facilities. Proof of approval or conditional approval by any road agency from which the Utility Solar Energy Facility will have access or whose roads will be used as a construction or maintenance route shall be submitted. Livingston County Road Commission and Drain Commission~~
13. Drain Commission: Proof of approval or conditional approval by Livingston County Road Commission and the Livingston County Drain Commission for any Utility Solar Energy Facility that has participating properties with a county drain or propose improvements within a county drain easement.
14. Manufacturers' Safety Data Sheet(s): Documentation include the type and quantity of all materials used in the operation of all equipment shall be submitted.
- ~~14.~~15. Wildlife Impact: Copy of the Wildlife Impact Analysis shall be submitted.
- ~~14.~~16. Environmental Impact: Copy of the Environmental Impact Analysis shall be submitted.
17. Soil Chemical Analysis: A chemical analysis and borings including a Cation Exchange Capacity (CEC) of the soil involved in the project must be completed as recommended by the ~~township~~ Township engineer ~~to establish a baseline to be used for future soil testing result comparisons for organic and inorganic compounds levels.~~
18. Complaint Resolution Protocol: Copy of Complaint Resolution Protocol shall be submitted.
19. Decommissioning Plan: Copy of the decommissioning plans ~~and a description of how any surety bond is applied to the decommissioning process~~ shall be submitted.
20. Emergency Action Plan: Copy of a the Emergency Action plan for the actions to be taken in event of an emergency. The emergency action plan must include a fire suppression plan, including the technology to be used and the training and equipment to be provided to township or other firefighters before the facility becomes operational. The emergency action plan must include plans for immediate cleanup and long-term aftermath efforts following an emergency shall be submitted.
21. Indemnification: An attestation that the applicant, owner, operator, and property owners will indemnify and hold the Township harmless from any costs or liability arising from the approval, installation, construction, maintenance, use, repair, or removal of the Utility Solar Energy Facility, which is subject to the Township's review and approval, shall be submitted.
22. Right-to-Enter: Submission of an application for a Utility Solar Energy Facility grants the ~~The township~~ Township and its agents shall have the right upon issuing any to enter the facility and any participating property for inspection of the Utility Solar Energy Facility at any at any reasonable time. The ~~township~~ Township may hire a consultant to assist with any such inspections at a reasonable cost to be charged to the.
23. Additional Information: Any additional information, studies, or documentation requested by the ~~Planning Commission, Township Board, or other Township representative~~ Township or its agents that are deemed necessary to determine compliance with this Ordinance and other applicable laws and regulations.
24. Application Fee: Review fees shall be submitted for a Land Use Permit application. Special Use Permit application, site plan review, and required escrow fee to the township

~~in the amount specified in the free schedule adopted by the Board of Trustees. This shall include, but not be limited to, independent review by experts, as deemed necessary by the Planning Commission.~~

- I. Utility Solar Energy Facilities under PA 233:** On or after November 29, 2024, once PA 233 of 2023 is in effect, the following provisions apply to Utility Solar Energy Facilities with a nameplate capacity of one hundred (50/100) megawatts or more and an energy discharge capability of 200 megawatt hours or more. To the extent these provisions conflict with the other provisions in §17.35 Utility Solar Energy Facilities subsections A–C above, these provisions control ~~as to such Wind Energy Systems~~. This subsection does not apply if PA 233 of 2023 is repealed, enjoined, or otherwise not in effect, and does not apply to ~~Battery Energy Storage Systems with a nameplate capacity of less than 50 megawatts or an energy discharge capability of fewer than 200 megawatt hours~~ Utility Solar Energy Facilities with a nameplate capacity of less than one hundred (100) megawatts. All provisions in ~~subsection A–C §17.35 Utility Solar Energy Facilities above~~ that do not conflict with this subsection remain in full force and effect.

- 21.1. Setbacks–:** Utility Solar Energy must comply with the ~~following~~ minimum setback requirements in the table below, with setback distances measured from the nearest edge of the perimeter fencing of the facility.

Setback Description	Setback Distance
Occupied community buildings and dwellings on nonparticipating properties	300 feet from the nearest point on the outer wall
Public road right-of-way	50 feet measured from the nearest edge of a public road right-of-way
Nonparticipating parties	50 feet measured from the nearest shared property line

- 22.2. Fencing–:** Fencing for the Utility Solar Energy ~~Facility~~ Facilities must comply with the latest version of the National Electric Code as of November 29, 2024, or as subsequently amended.

- 23.3. Height:** Solar panel components must not exceed a maximum height of twenty-five (25) feet above ground when the arrays are at full tilt.

- 24.4. Noise ~~Sound~~–:** The Utility Solar Energy Facility must not generate a maximum sound in excess of fifty-five (55) average hourly decibels as modeled at the nearest outer wall of the nearest dwelling located on an adjacent nonparticipating property. Decibel modeling shall use the A-weighted scale as designed by the American National Standards Institute.

- 25.5. Lighting–:** The Utility Solar Energy Facility must implement dark sky-friendly lighting solutions.

- 26.6. Environmental Regulations–:** Utility Solar Energy Facilities must comply with applicable state or federal environmental regulations.

- 7. Host community ~~Community agreement~~ Agreement–:** The applicant shall enter into a host community agreement with the Township. The host community agreement shall

require that, upon commencement of any operation, the Utility Solar Energy Facility owner must pay the Township two thousand dollars (\$2,000.00) per megawatt of nameplate capacity. The payment shall be used as determined by the Township for police, fire, public safety, or other infrastructure, or other projects as agreed to by the ~~local unit~~ Township and the applicant.

8. PA 233 Requirements: The Utility Solar Energy Facility shall be subject to the other applicable rules and regulations outlined in PA 233 of 2023 and by the Michigan Public Service Commission.

27.9. Applicant's Option: An applicant can elect at the time of application to have their application for a Utility Solar Energy Facility processed using the other provisions of §17.37 Utility Solar Energy Facilities, even if PA 233 of 2023 is in full effect.

Section 2. Severability and Validity.

If any portion of this Ordinance is found invalid for any reason, such holding will not affect the validity of the remaining portions of this Ordinance.

Section 3. Repealer.

All other ordinances inconsistent with the provisions of this Ordinance are hereby repealed to the extent necessary to give this Ordinance full force and effect.

Section 4. Effective Date.

This Ordinance takes effect upon the expiration of 7 days after publication as required by MCL 125.3401(7).

Section 1- Amendments to Article XVII Standards for Specific Special Land Uses

ARTICLE XVII STANDARDS FOR SPECIFIC SPECIAL LAND USES IS AMENDED BY THE ADDITION OF A NEW SECTION 17.37, WHICH SHALL READ AS FOLLOWS:

Section 17.37 Utility Wind Energy Systems Conversion Facilities

- A. Intent and Purpose:** The intent and purpose of this section is to establish standards for the siting, installation, operation, repair, decommissioning, and removal of Utility Wind Energy Systems Conversion Facilities; establish the process for the reviewing and permitting of such facilities; protect the health, welfare, safety, and quality of life of the general public; and ensure compatibility with land uses in the vicinity of the areas affected by such facilities.
- B. Locational Requirements:** Wind Energy System Facility must submit the following additional materials with the Special Land Use Application. Utility Wind Energy Conversion Facilities are permitted by special use permit in the SFO Solar Farm Overlay District.
- C. Site Requirements:** Utility Wind Energy Conversion Facility sites shall meet the site standards below.
1. Site Composition: The site may consist of a single participating property or multiple adjoining participating properties. All participating properties must have signed agreements to participate in the Utility Wind Energy Conversion Facility.
 2. Lot Area: The site shall have a total net lot area of be at least fifty (50) acres and no more than one thousand (1000) acres.
 3. Access: Utility Wind Energy Conversion Facilities shall meet the access standards below.
 - a) Road or Easement: There shall be direct site, all fenced compounds, and every wind turbine shall have direct access from a public road or an access easement with a maximum length of one thousand two hundred fifty (1,250) feet and width of at least thirty-three (33) feet.
 - a)b) Access Drive Material: Access drives shall have a hard surface or material that can pack hard that is sufficient to support fire apparatus and provide access at all times of the year.
 - b)c) Access Drive Maintenance: Access drives must be maintained and kept accessible at all times. The applicant, owner, operator, and property owners shall be jointly and severally responsible for maintenance of the access roads.
 - e)d) Access Drive Design: Access drives shall be designed to reduce the impact on agricultural use of the land and the visual impact. Access drives shall not impede the natural flow of water.
 - d)e) Gates and Doors: All access gates and doors to Utility Wind Energy System Conversion Facility compounds, and electrical equipment, and wind turbines shall be lockable and kept secured at all times when service personnel are not present.
 - f) Towers: Wind turbines shall not be climbable for a height of twenty (20) feet above the ground.
 4. Setbacks: Wind turbines, fenced compounds, and electrical equipment shall meet the setback standards below.

e)a) Measurement: Setbacks from wind turbines shall be measured horizontally from the center of the tower base.

f)b) Fences and Improved Areas: All fences and improved areas shall comply with the applicable setback for the underlying zoning district in which it is located.

g)c) Fenced Compounds: All structures and improved areas located within the fenced compound shall be at least thirty (30) feet from the fence line.

d) Wind Turbines: Wind turbines shall be meet the setbacks in the table below.

<u>Setback from</u>	<u>Distance</u>
<u>Non-participating property lines</u>	<u>2.5 times wind turbine height</u>
<u>Occupied buildings on non-participating properties</u>	<u>3 times the wind turbine height</u>
<u>Occupied buildings on participating properties</u>	<u>1.5 times the wind turbine height</u>
<u>Lakes, rivers, creeks and similar bodies of water</u>	<u>1,250 feet</u>
<u>Adjacent wind turbine</u>	<u>1.5 times wind turbine height</u>
<u>Road rights-of-way</u>	<u>1.5 times wind turbine height</u>

~~The minimum setback from any property line of a non-participating property or any road right-of-way is 3,000 feet or five times the tip height of each turbine in the Wind Energy System, whichever is greater. Additionally, each turbine must be located at least 0.5 miles from the nearest lake or body of water. If a single Wind Energy System is located on more than one lot, or if the adjacent parcel is owned by the same owner as the property on which the Wind Energy System is located, then the lot line setbacks of this subsection do not apply to the lot lines shared by those lots.~~

5. Height: ~~The height of a Wind Energy System with the blade fully extended must not exceed~~ Wind turbines shall have a maximum height of three hundred (300) feet.

6. Lighting: ~~Lighting shall be limited to for Utility Wind Energy System Facility Facilities only and shall comply with Section § 14.04 (E) Lighting and the standards below.~~

a) Safe Operation: ~~Lighting of the facility Wind Energy System is limited to the minimum light necessary for safe operation.~~

b) Federal Aviation Administration: ~~Towers may be~~ Wind turbines shall lit only be illuminated to the minimum extent required by the Federal Aviation Administration.

c) Nature of Light: Wind turbines shall not have strobe or pulse lighting.

d) Synchronized: All wind turbine lighting shall be synchronized to illuminate at the same time.

e) Shielded: Wind turbine lighting shall be shielded to the maximum extent possible to reduce glare and visibility from the ground.

7. Wind Turbines: Wind turbines within a Utility Wind Energy System Facility shall meet the design standards below.

a) Consistent: All wind turbines within the facility shall be of the same design and appearance.

- b) Monopole: All wind turbines shall be of a monopole design.
- c) Appearance: All Wind Energy System wind turbines and towers must be painted a non-obtrusive, neutral color, such as beige, gray, or off-white and must be non-reflective. The tower, nacelle, All turbines bases and blades must be the same color and must be consistent with the color of other Wind Energy System in the Township. No advertisements Advertisements, graphics, or striping are not permitted on the blades or towers wind turbines. The applicant is encouraged to select anti-icing paint that prevents the formation of ice on the surface of the turbine's blades.
- d) Rotation: All wind turbine blades within a Utility Wind Energy Conversion Facility shall rotate in the same direction.
- e) Good Condition: All wind turbines shall be maintained in good condition at all times, consistent with or better than industry standards.
- f) Deicing: All wind turbines must be equipped with technology that automatically deices the turbine blades. The system must detect ice and heat the blades, such as through the use of built-in carbon heating mats or through the circulation of hot air. Turbine blades shall use stick-free surface coatings to the maximum extent practical.
- h)g) Clearance: Ground Clearance. The clearance from ground level to the blade at its lowest point must be The swept area shall have a ground clearance of at least one hundred (100) feet. Blade Arc Clearance. Blade arcs created by a Wind Energy System must have and a clearance of at least minimum of one hundred (100) feet of clearance over and away from any structure.
- h) Braking: Each Wind Energy System All wind turbines must be equipped with both an automatic and a manual braking or equivalent device, capable of stopping the Wind Energy System's wind turbine's operation in high winds with or without supervisory control and data acquisition ("SCADA") control. The automatic braking system must be effective during complete grid power failure when the Wind Energy System wind turbine is unable to communicate with SCADA supervisory control and data acquisition control or receive power.
- i) Certification: All wind turbines shall be approved by Underwriters Laboratories, Det Norske Veritas, Germanischer Lloyd Wind Energie, or an equivalent third party.
8. Wiring: Underground Transmission. All power transmission, communication, or other lines, wires, or conduits within a Utility Wind Energy Conversion Facility shall meet the standards below. from a Utility Scale Wind Energy System to any building or other structure shall be located underground at a depth that complies with current National Electrical Code standards, except for power switchyards or the area within a substation.
- a) Stray Voltage: All collection system wiring shall comply with all applicable safety and stray voltage standards. Stray voltage originating from a Utility Wind Energy Conversion Facility shall not be detected on any participating or non-participating properties
- 1) Preconstruction Test: Stray Voltage Assessments: No stray voltage originating from a Wind Energy System may be detected on any participating or non-participating property. A preconstruction stray voltage test shall be conducted on all Michigan Department of Agriculture & Rural Development (MDARD) registered livestock facilities located within a one-mile radius of the all

participating properties. The tests shall be performed by an investigator approved by the Township at the ~~applicant/owner's~~applicant's expense.

2) Report: A report of the tests shall be provided to the owners of all property included in the study area.

3) Permission: The applicant/landowner shall seek written permission from ~~the~~ property owners prior to conducting testing ~~on such owners' property~~. ~~Applicants/landowners shall not be required to perform testing. Testing shall not be required~~ on non-participating property properties where the owners have refused to grant permission to conduct the testing. The owner of any participating property included in the list of project parcels shall not refuse the stray voltage testing ~~if they have a MDARD registered livestock facility on the participating property~~.

b) Underground: Wiring shall be underground, except for power switchyards or the area within a fenced substation. When the Township finds underground wiring is not feasible due to soil or water conditions the above-ground lines, transformers, or conductors should follow any Avian Power Line Interaction Committee (APLIC, <http://www.aplic.org/>) guidelines to prevent avian mortality.

c) Depth: Wiring shall be located at a depth to prevent any damage from freezing or frost, to prevent interference with drain tiles, and at a depth that complies with current National Electrical Code standards. ~~All electrical connection systems and lines from the Wind Energy System Facility to the electrical grid connection shall be located and maintained a minimum of six (6) feet underground within and adjacent to the site.~~

d) Interference: Wiring shall be located and designed to not cause interference with wired or wireless communication systems.

e) Armoring: Concrete armoring techniques shall be used at every location where wiring crosses a county drain, river, water line, or sewer line.

f) Marking: Permanent, visible markers or tracing wires shall be installed to indicate the location of wiring.

g) Drain Tiles: Wiring shall be located to minimize conflict with drain tiles.

9. Drain Tiles: Drain tiles within the Utility Wind Energy Conversion Facility shall be preserved and maintained throughout the construction, operation, and restoration periods, as described below.

a) Initial Inspection: ~~Prior to~~Before the start of construction, ~~any-all~~ existing drain tiles within the facility and within any disturbed areas must be inspected by robotic camera ~~and with~~ the imagery submitted to the ~~township~~Township for baseline documentation on tile conditions. ~~Any damage shall be repaired, and a report submitted to the landowner and township. While the facility is in operation, the owner or operator must reinspect the drain tiles every three (3) years by robotic camera for any damage and must repair any damage within sixty (60) days of discovery. The owner or operator must report the inspection, along with any damage and repair, to the township within ninety (90) days after each three-year deadline. The township reserves the right to have the building inspector or other agent present at the time of~~

~~repair. Wind Energy structure, structures, containers, cabinets and/or foundations shall be constructed to preserve any existing and new drainage field tile or system.~~

- ~~b) Continuing Inspection: Drain tiles must be reinspected by robotic camera every three (3) years while the facility is in operation or when conditions indicate there may be damage to drain tiles with the imagery submitted to the Township.~~
- ~~c) Repairs: Damage drain tiles shall be repaired within sixty (60) days of discovery. The Township shall be notified of any necessary repairs before the work commences and documentation of the repair work. Repairs necessary to address an emergency situation may be completed without prior notice to the Township.~~
- ~~d) Inspection: The Township reserves the right to have a Township official or other agent present at the time of repair.~~

~~10. Fire Suppression: The Wind Energy System shall include a~~ fire suppression system ~~shall be provided~~ that is specifically designed to immediately suppress and extinguish fires in any part of the ~~Wind Energy System~~ Utility Wind Energy Conversion Facility, including the wind turbines, electrical equipment, and transformers.

- ~~a) Documentation: The owner/operator shall provide documentation~~ Documentation shall be provided establishing confirming the effectiveness of the fire suppression system and the results of a third-party independent ~~inspection (approved by the Township) of inspection, as approved by the Township, of~~ the fire suppression system.
- ~~b) Fire Authority: The fire suppression system shall also be reviewed and approved by the local fire department~~ Township's fire authority.
- ~~c) Annual Inspection: The fire suppression system shall be inspected and approved yearly by a third-party independent inspecting company that is approved by the Township.~~

~~11. Groundcover: Utility~~ Wind Energy ~~Systems Conversion Facilities~~ shall include the installation of perennial ground cover vegetation that shall be maintained for the duration of operation until the site is ~~decommissioned where appropriate within the site.~~

- ~~a) PA 116 Lands: Land within the project area that are~~ enrolled or bound by the Farmland Preservation Program must follow the Michigan Department of Agriculture and Rural Development (MDARD) Policy for Allowing Commercial Renewable Energy Development on PA 116 Lands.
- ~~b) Non-PA 116 Lands: Land within the project that are~~ not enrolled or bound by the Farmland Preservation Program must provide at least one (1) of the following types of ~~dual dual~~-use ground cover to promote ecological benefits:

- 1) Pollinators: Pollinator habitat with a score of at least seventy-six (76) on the Michigan Pollinator Habitat Planning Scorecard for Solar Sites (www.pollinators.msu.edu);
- 2) Conservation Cover: Conservation cover focused on restoring native plants, grasses, or prairie with the aim of protecting specific species, such as bird habitat, or providing specific ecosystem services, such as carbon sequestration or improving soil health;

3) Grazing: Incorporation of rotational livestock grazing and forage production as part of an overall vegetative maintenance plan; or

4) Crops: Raising crops for food, fiber, or fuel and generating electricity within the site to maximize land use.

i)c) Alternative Ground Cover: The ~~township-Township~~ may approve or require alternative ground cover upon finding it is not feasible to provide groundcover as defined above.

j)d) Ground Cover Nature: All ground cover must be native plants with substantial root systems to support soil. Turf grass is not permitted as ground cover.

e) Invasives and Noxious: Invasive species and noxious weeds are not permitted and must be removed in a timely manner.

2.12. Fencing: Utility Wind Energy System Conversion Facility compounds shall be completely surrounded by a fence designed to prevent unauthorized access and to screen the facility.

a) Height: The fence shall be at least seven (7) feet tall.

b) Fence Posts: Fence posts shall extend at least thirty-six (36) inches into the ground, and gate posts and corner posts shall have a concrete foundation.

c) Fence Type: The fence shall be a woven agricultural-style fence. The Township may require or allow durable green opaque material to be integrated into the fence if necessary for buffering or screening.

d) Gate Access: Gates shall be provided at all access points, unless otherwise permitted or approved. Gates for vehicular access shall be approved by the Fire Authority.

e) Gate Type: Gates shall be the same height and constructed of the same material as the fencing. Access, such as Knox box, shall be provided for emergency responders.

f) Wildlife Considerations: The ~~township-Township~~ may require or allow a fence design to allow for the passage of wildlife upon a finding that adequate access control and visual screening will be preserved.

g) Alternate fencing may be approved by the ~~township-Township~~ upon a finding that the alternative provides adequate access control and visual screening.

13. Signage: Advertising or non-project related graphics shall be prohibited. This exclusion does not apply to signs required by this ~~ordinance~~Ordinance.

D. Buffering Requirements: Utility Wind Energy Conversion Facilities shall provide buffering described below.

1. Vegetative Buffer: There shall be a landscape buffer at least twenty (20) feet wide along the exterior of any fenced compound, whenever existing natural vegetation does not otherwise reasonably obscure the ~~Wind Energy System Facility, as described below~~fenced compound.

a) Design: The buffer shall ~~be installed to obscure Wind Energy System Facility and shall contain~~have two (2) rows of staggered evergreen trees planted ~~not less than~~ twelve (12) feet apart ~~or less trunk-trunk-to-trunk, and, the~~The two (2) rows shall

be ten (10) feet apart. The ~~township~~ Township may consider an alternative landscape buffer as a part of ~~the Special Land Uses~~ special use permit approval, provided the alternative buffer provides adequate screening.

b) Vegetation Size: Plantings shall be at least eight (8) feet tall at time of planting, measured from the top of the root ball to the base of the leader ~~(, not including the height of the leader)~~, and must be a species that can reasonably be expected to reach a height of ten (10) feet within three (3) growing seasons.

c) Maintenance: The trees may be trimmed but must maintain a height of at least eighteen (18) feet. Damaged or diseased trees shall be replaced at the next appropriate planting season.

d) Evergreen Species: Evergreen trees shall be Norway Spruce in ~~Row One~~ the row closest to fence. ~~Row Two shall be and~~ Thuja Green Giant Arborvitae in the row away from the fence. The Township may consider alternative evergreen species as part of special use permit approval, provided the alternative species are more appropriate for the local conditions.

2. Buffer Maintenance: Good arboricultural techniques shall be followed with respect to vegetation, including, but not limited to, proper pruning, proper fertilizing, and proper mulching, so that the vegetation will reach maturity as soon as practical and will have maximum density in foliage. Dead or diseased vegetation shall be removed and must be replanted in a manner consistent with this section ~~these standards~~ at the next appropriate planting ~~time~~ season.

E. Performance Standards: Utility Wind Energy Conversion Facilities shall meet the performance standards below.

1. Compliance: ~~Wind Energy Systems~~ Utility Wind Energy Conversion Facilities shall be designed, constructed, operated, and maintained in compliance with all applicable provisions of local, state, and federal laws and regulations and industry standards.

3.2. Noise Sound: The noise sound generated by a ~~Wind Energy System~~ Utility Wind Energy Conversion Facilities must meet the sound standards of this Ordinance and the additional standards below. ~~not exceed the following limits~~

a) Day Sound Level: The maximum sound level shall be Forty-four (40) Dba Lmax, as measured at the ~~lot line of the project property~~ project boundary and road rights-of-way, between the hours of 7:00 am and 9:00 pm.

b) Night Sound Level: The maximum sound level shall be Thirty-five (35) Dba Lmax, as measured at the ~~lot line of the project property~~ project boundary and road rights-of-way between the hours of 9:00 pm and 7:00 am.

c) Pure Tone: If pure tones are produced, the maximum sound level shall be reduced by five (5) Dba.

e)d) Ambient Sound: If the ambient sound levels exceed these standards, the maximum sound level shall be the ambient sound level plus five (5) Dba.

d)e) Inverter Sound Screening: In addition to the above limitations, a ~~A~~ sound barrier of a solid decorative masonry wall or evergreen tree berm, with trees spaced not less than ten (10) feet apart, must be constructed to reduce noise levels surrounding all inverters. ~~The berm~~ Berms must be ~~no more than~~ within ten (10) feet ~~from of~~ all

inverters and, must be at least as tall as all inverters, but cannot be more than three (3) feet taller than the height of all the adjacent inverters.

f) Continued Compliance: The noise-sound level by a Utility Wind Energy Conversion System Facility - Facilities must be inspected every three (3) years, at the operator's expense, by an auditory expert to ensure compliance with applicable these noise requirements sound standards.

3. Flicker and Glint: Reasonable design and operation shall be used to minimize or mitigate flicker and blade glint impacts on non-participating habitable buildings, public roads, and all road intersections.

4. Reports: In addition to other reports identified in this Ordinance, the owner or operation shall submit the following reports during the operation of Utility Wind Energy Conversion Facilities.

a) Annual Report: An annual report shall be provided to the zoning administrator showing continuity of operation.

b) Operation. A report shall be provided to the zoning administrator if the Utility Wind Energy Conversion Facility or any of its components are no longer being used, and shall notify the zoning administrator if use is to cease, prior to decommissioning, or abandonment.

c) Incident Report: Reports shall be submitted if there is a major incident at the Utility Wind Energy Facility that did or could have caused harm to life or property, including calls for service from emergency responders. The report shall identify the cause of the incident and corrective action to prevent future incidents of that nature.

5. Safety: Utility Wind Energy Conversion Facilities shall be subject to the safety standards below.

a) Warning Signs: The manufacturer's or installer's identification and appropriate warning signs shall be posted on or near each battery structure wind turbine in a clearly visible manner.

b) Fire Suppression and Data Sheets: Fire suppression plans and Safety Data Sheets shall be kept onsite and be accessible for emergency responders.

c) Safety Manual: ~~The applicant will provide an~~ An unredacted copy of the manufacturer's safety manual for each component of the Utility Wind Energy System Conversion Facility, without distribution restraints, will be provided before construction commences. ~~These will~~ to be kept at the Township Hall and other locations deemed necessary by Planning Commission the Township or local first responders. The manual should include standard details for an industrial site such as materials, chemicals, fire, access, safe distances during a Utility Wind Energy System Conversion Facility failure, processes in emergencies, etc.

6. Interference: ~~A Wind Energy System~~ Utility Wind Energy Conversion Facilities must not interfere with any radio, television, or other communication systems. ~~If the Township or the applicant or operator of the Wind Energy System receive a complaint about communication interference,~~ t The applicant or operator must resolve the any known interference immediately and provide proof that the interference has been resolved within ninety (90) days.

7. Complaint Resolution: ~~Utility~~ Wind Energy ~~Systems-Conversion Facilities~~ shall provide a complaint resolution process, as described below.

e)a) Signs: ~~The site shall have~~ Signs posted with contact information to ~~collect report~~ complaints related to the ~~Utility~~ Wind Energy ~~System-Conversion~~ Facility ~~shall be posted throughout the project area. Signs shall be posted before construction begins and maintained until decommissioning is complete.~~

b) Resolution Options: Any resolution shall include lawful and reasonable solutions consistent with ~~the zoning~~this ordinance~~Ordinance, which shall also be provided to the zoning administrator.~~

c) Contact: A twenty-four hour (24) hour, toll free number shall be established ~~the owner or operator to receive complaints. Additional reporting methods, such as postal mail or electronic mail, may also be used.~~

d) Log: A log shall be kept by the owner or operator of all complaints received and ~~documentation of the resolution. The log shall be available to the township officials for review, per township request by Township Officials.~~

d)e) Notification: ~~The zoning administrator shall receive notification of all complaints received. An annual report shall be submitted to the zoning administrator and the township board~~Township that details all complaints received, the status of complaint resolution, and actions taken to ~~mitigate~~resolve complaints.

e)f) Resolution Period: ~~Complaints for hazardous conditions shall be resolved within twelve (12) hours or as soon as reasonable possible. The operator or its agent shall respond to~~Other complainants shall be resolved within ten (10) business days and shall provide notification to the zoning administrator. The zoning administrator shall receive notification of all complaints received.

g) Adjudication: The operator or its assigns reserve the right to adjudicate any claims, including residential claims, in a court of competent jurisdiction.

8. Insurance and Performance Guarantees: ~~Utility~~ Wind Energy ~~Conversion Facilities~~ shall provide insurance and performance guarantees. These are in addition to other ~~insurance or performance guarantees required by this Ordinance or other entities.~~

a) General Liability Insurance: ~~Utility~~ Wind Energy ~~Systems-Conversion Facilities~~ shall have and maintain general liability insurance of at least ten million (\$10,000,000) dollars. ~~The township~~Township may require a higher amount for larger projects and may allow for a lesser amount for smaller projects upon a finding that the alternate amount is more consistent with the likely risk.

b) General Maintenance ~~Bond~~Performance Guarantee:- ~~The township shall require a~~General Maintenance ~~Bond~~Performance Guarantee shall be provided before construction commences to guarantee all aspects of this ~~ordinance~~Ordinance are met at all times during the construction and operation of the ~~Wind Energy System~~Utility Wind Energy Conversion Facility. At the time of the ~~Special Use~~ application, the applicant shall submit two (2) third-party contractor bids for construction of all fencing, landscaping, and drainage improvements associated with the ~~Utility~~ Wind Energy System Facility, and the ~~bond performance guarantee~~ shall be the higher of the two (2) bids. The ~~township~~Township may use the ~~bond performance guarantee~~ to repair any landscaping, fencing, drainage infrastructure

(including drainage tiles), and/or to correct any ongoing violation of this ordinance Ordinance in the event that the site improvements for the Utility Wind Energy System Conversion Facility ~~owner fails to adequately~~ is not maintained the required site improvements, or the Utility Wind Energy Conversion Facility fails to make operational changes to correct an operational violation.

- c) Road Performance Guarantee: ~~In addition, in order to assure the funds will be available to perform all road repairs required under this ordinance, the applicant will be required to post financial security acceptable to the township, in the form of~~ A road performance guarantee shall be provided before construction comments in a form acceptable to the Township, such as: a) a surety bond from a surety listed as acceptable on the Federal Surety Bond circular 570 of the U.S. Department of Treasury; or b) an acceptable irrevocable letter of credit; or c) an escrow account established in a financial institution licensed in the State of Michigan. A construction bond shall not be accepted. The amount of the security performance guarantee shall be ~~a minimum of at least~~ one million two hundred fifty thousand dollars (\$1,250,000), but this amount may be increased if the third-party consultant determines the amount needed for road repairs is greater than this amount. ~~The bond (or other security) performance guarantee shall only be released (, in whole or part), when the Township Board, in consultation with the LCRC-Livingston County Road Commission and Michigan Department of Transportation, as applicable, and the third-party inspector, determines that all required road work has been completed and approved by LCRC and/or MDOT the affected road agencies. The Township may waive the requirement for this performance guarantee if the road agencies collect a performance guarantee.~~
- d) Complaint Inspection Escrow: An escrow account, funded by the applicant, owner, or operator, to be used for investigation of complaints shall established before construction commences. The applicant shall be required, as a condition of the operation, to fund an escrow account for The escrow account shall be used by the Township for investigation of complaints, including reasonable reimbursement of qualified third-party agents, for, but not limited to, glare, stray voltage, noisesound, and signal interference in the amount of \$15,000 to be used at the discretion of the Township Board to pay for third-party investigative services, the provider of which shall be chosen by the township. Such funds shall be deposited with the The escrow account shall be kept with the Township Treasurer, , or with a third-party fiduciary, at the discretion of the township. The initial escrow account shall be in the amount of fifteen thousand dollars (\$15,000)). When the escrow account balance is below five thousand dollars (\$5,000), the township-Township shall notify the applicant responsible part, who must and the applicant shall replenish the escrow account to the amount of fifteen thousand (\$15,000) within a period of forty-five (45) calendar days.

5.9. Dust Control: Reasonable dust control measures shall be taken during construction and operation.

10. Plants and Grasses: Plants or grasses not part of the buffer area shall be maintained not to exceed at a height of twelve (12) inches or less. The ~~township-Township~~ may approve a taller height upon a finding that it will not result in a nuisance.

11. Wildlife: Utility Wind Energy Conversion Facilities shall be designed, sited, and operated in a manner to minimize impact on wildlife.

a) Wildlife Impact Analysis: The applicant shall have a third-party qualified professional, acceptable to the ~~T~~Township, conduct an analysis to identify and assess any potential impacts on wildlife and endangered species. At a minimum, the analysis shall include a thorough review of existing information regarding species and potential habitats in the vicinity of the project area. Where appropriate, surveys for bats, raptors, or general avian use should be conducted. The analysis shall include the potential effects on species listed under the federal Endangered Species Act and Michigan's Endangered Species Protection Law.

b) Adverse Impacts: ~~The applicant shall take appropriate~~ Appropriate measures shall be taken to minimize, eliminate, or mitigate adverse impacts identified in the analysis. The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.

a)c) Special Scrutiny: Sites requiring special scrutiny include wildlife refuges, other areas where birds are highly concentrated, bat hibernacula, wooded ridge tops that attract wildlife, sites that are frequented by federally- or state-listed endangered species of birds and bats, significant bird migration pathways, and areas that have landscape features known to attract large numbers of raptors.

d) US Fish and Wildlife Service. ~~At a minimum, the analysis shall include a thorough review of existing information regarding species and potential habitats in the vicinity of the project area. Where appropriate, surveys for bats, raptors, or general avian use should be conducted. The analysis shall include the potential effects on species listed under the federal Endangered Species Act and Michigan's Endangered Species Protection Law.~~ The applicant shall follow all pre-construction and post-construction recommendations of the United States Fish and Wildlife Service.

e) Post-Construction Mortality Study: ~~The analysis shall indicate whether a~~ A post-construction wildlife mortality study ~~will be conducted and may be required. The analysis should indicate if such a study is determined unnecessary and, if not, the reasons why such a study does not need to be conducted. Power lines should be placed underground, when feasible, to prevent avian collisions and electrocutions.~~ All above-ground lines, transformers, or conductors should follow any Avian Power Line Interaction Committee (APLIC, <http://www.aplic.org/>) guidelines to prevent avian mortality.

12. Environment: Utility Wind Energy Conversion Facilities shall be designed, sited, and operated to minimize impact on the environment.

b)a) Environmental Impact Analysis: The applicant shall have a third-party qualified professional, acceptable to the ~~township~~Township, conduct an analysis to identify and assess any potential impacts on the natural environment including, but not limited to, wetlands and other fragile ecosystems, historical and cultural sites, and antiquities.

e)b) Adverse Impacts: ~~The applicant shall take appropriate~~ Appropriate measures shall be taken to minimize, eliminate, or mitigate adverse impacts identified in the analysis. The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.

c) Environmental Laws: ~~The applicant~~Utility Wind Energy Conversion Facilities shall comply with applicable parts of the Michigan Natural Resources and Environmental protection Act (Act 451 of 1994, MCL 324.101 et seq.), Part 91 Soil Erosion and

Sedimentation Control (MCL 324.9101 et seq.), Part 301 Inland Lakes and Streams (MCL 324.30101 et seq.), Part 303 Wetlands (MCL 324.30301 et seq.), Part 323 Shoreland Protection and Management (MCL 324.32301 et seq.), Part 325 Great Lakes Submerged Lands (MCL 324.32501 et seq.), and Part 353 Sand Dunes Protection and Management (MCL 324.35301 et seq.).

d) Containment System: A containment system shall surround any transformers in case of hazardous waste or oil spills.

d)e) Removal: All solid and hazardous waste materials shall be promptly removed from the site and disposed of properly.

f) Responsibility: The Utility Wind Energy System Conversion Facility owner, operator, and property owner shall be responsible, jointly and severally, for mitigating erosion, flooding, and all other environmental impacts resulting from the Wind Energy System Facility.

13. Emergency Action Plan: Utility Wind Energy Conversion Facilities ~~Copy of a plan for the~~ shall have an Emergency Action Plan to identify actions to be taken in event of an emergency.

a) Fire Suppression: The ~~emergency-Emergency action-Action plan-Plan~~ must include a fire suppression plan, including the technology to be used and the training and equipment to be provided to ~~township-Township~~ or other firefighters before the facility becomes operational.

b) Special Equipment and Training: The Emergency Action Plan shall identify special equipment and training that is required for emergency response to the Utility Wind Energy Conversion Facility.

e)c) Clean-up: The emergency action plan must include plans for immediate cleanup and long-term aftermath efforts following an emergency.

d) Emergency Action Plan and Emergency Training: Before the Utility Wind Energy System Conversion Facility is operational, it must provide the necessary training, equipment, or agreements specified in the application-Emergency Action Plan to ~~township-the Township~~ or other emergency personnel. All training must be consistent with current industry standards.

e) Public Record: The ~~emergency-Emergency Action plan-Plan~~ will be a public record.

F. General Provisions: Utility Wind Energy Conversion Facilities shall be subject to the general provisions below.

1. Damage Repair: The Utility Wind Energy System Conversion Facility owner, operator, and property owner shall be responsible, jointly and severally, for making repairs to any public roads, drains, and infrastructure damaged by the construction of, use of, maintenance of, or damage to, a Utility Wind Energy System Facility. ~~Any battery, battery structure, or battery component damaged beyond repair or use must be removed from the project site within five (5) days and must be disposed of off-site in accordance with any state or federal requirements. All battery installation or structures shall conform to the regulations outlined in Section 17.38, Utility Scale Battery Energy Storage Systems.~~

2. Mixed Facilities: Utility Wind Energy Conversion Facilities may be collocated with other renewable energy facilities, such and Utility Battery Energy Storage Facilities or Utility Solar Farms. Review and approval is required for each use.
3. As-Built: The owner/operator/applicant shall submit an as-built drawing with dimensions relative to property lines of all new structures including turbines and buried cable both inside and outside fenced areas upon completion and before any power is supplied to the grid. The as-built drawing shall be a scale of 1" = 200 feet.
- 6.4. Repowering or Modifications: Any modifications of an approved site plan or special use permit that are made after the initial date of approval, including, but not limited to, an expansion of project, repowering, reconfiguration, technological updates, shall be resubmitted to the Township Planning Commission for review at an additional fee based upon current fee schedule shall require new site plan and special use permit applications. Any changes of the approved site plan or special use permit, will be subject to this ordinance-Ordinance as it exists at time of this new application, will require a new site plan application and review, including reconfiguration of arrays, updating current technology, and Utility-Scaled Battery Energy Storage Facility infrastructure.
5. Transfer or Sale: In the event of a transfer or sale of the aUtility Wind Energy System Facility, the new owner or operator must notify the township-Township within thirty (30) days, and the zoning administrator shall administratively amend the permit to name the new owner or operator. Upon transfer or sale, the cash bond shall be transferred to the new owner or operator and shall be maintained at all times, the estimated costs of decommissioning shall be resubmitted, and the security bond adjusted to account for the new estimate.

G. Decommissioning, Abandonment, and Restoration: Following the operational life or abandonment of a Utility Wind Energy Conversion Facility, of the project, the applicant shall perform decommissioning and removal of the Wind Energy System Facility and all of its components and restore the site to its original condition the site shall be decommissioned and restored as outlined below.

1. Decommissioning Plan: The applicant shall have a third-party qualified professional, acceptable to the Township, prepare a decommissioning plan. The decommissioning plan shall be written to provide security to the township for one hundred twenty-five percent (125%) of the cost to remove and dispose of all panels, wiring, and restoration of the land to its original conditions. The value of decommissioning shall be determined by a third-party financial consultant or engineer selected by the township and paid for by the developer. The decommissioning security shall be paid in cash to the township. Once value of decommissioning is determined, it shall be updated on a periodic basis of not less than every three (3) years and additional security may be required on the basis of the average inflation rate of the preceding three (3) years.
 - a) Anticipated Life: The decommissioning plan shall describe the anticipated life span of the Utility Wind Energy Conversion Facility and its components.
 - b) Decommissioning Costs: The decommissioning plan shall provide a probable cost estimate for decommissioning, including current cost and cost at the time of decommissioning.
 - c) How Paid: The decommissioning plan shall provide a description of how decommissioning costs will be paid.

d) Regular Updating: The decommissioning plan shall be updated on a regular, period basis at of at least once every three (3) years.

7.2. Abandonment: Utility Wind Energy Systems-Conversion Facilities or any components that are not operated for a continuous period of ~~twelve (12)~~six (6) months shall be considered abandoned ~~and shall be subject to removal proceedings., whether or not there is an intent to continue the use, and shall be removed or restored to operation.~~

3. Damage: Any Utility Wind Energy System-Conversion Facility components that are damaged shall be replaced or removed within seven (7) days. An extension may be granted by the Township upon finding that it is not feasible to replace or remove the component in that period and that the delay does not create a hazardous condition.

8.4. Unsafe: Any unsafe components shall be removed or made safe within a reasonable period as determined by the Township.

9.5. Compaction Prevention: All abandonment and decommissioning work must be done when soil is dry or frozen to prevent compaction.

6. Chemical Analysis and Boring: A chemical analysis and boring of the soil, as recommended by the ~~township-~~Township engineer shall be performed ~~prior to before~~ any decommissioning work begins and with the results compared to the baseline soil chemical analysis baseline test results obtained ~~prior to before~~ construction of the Utility Wind Energy System-Conversion Facility.

a) Chemical Levels: All levels of any chemical entity found in the soil chemical analysis must be equal to or are lower than the levels of all chemical entities determined in the baseline testing performed prior to construction. If a new chemical entity, either organic or inorganic compounds, are identified in the soil chemical analysis, its level must be below established federal and state government levels for hazardous materials in soils for that chemical entity.

b) Report: A report of the soil chemical analysis must be provided to the Township within seven (7) days. If any chemical entity, organic or inorganic compounds, are above ~~the baseline levels determined prior to construction of the Wind Energy System and if any new chemical entity, organic or inorganic, are identified and their levels are above~~ established federal and state government levels for hazardous materials in soils, ~~the owner/operator must the~~ report ~~the results to the Township and must be submitted to the~~ appropriate Federal and State regulatory agencies within seven (7) days of receiving the testing report showing a violation.

c) Violation Mitigation: Once a violation has been determined and finalized, a reclamation plan for the contaminated soil must be developed and implemented to remove the contaminated soil from the Utility Wind Energy System-Conversion Facility site. The reclamation plan must meet all Federal and State regulations for the reclamation of a contaminated site. The plan must be approved by the ~~township~~ Township Board ~~of Trustees~~ and the ~~township-~~Township engineer. Once the contaminated soil has been removed and replaced with uncontaminated soil, a final soil chemical analysis shall be performed to confirm the Utility Wind Energy System-Conversion Facility site soils has have been returned to its original state for levels of organic and inorganic compounds ~~prior to construction of the Wind Energy System Facility that existed before construction.~~

- d) Cation Exchange Capacity. A Cation Exchange Capacity soil test shall also be required at the completion of the decommissioning process.
- e) Violation Mitigation 2: Any negative variations from the preconstruction soil testing must be remedied and the final results of the testing approved by the township engineer and the township Board of Trustees.

40.7. Ground Restoration: The ground must be restored to its original topography and land must be restored to a depth of three (3) feet below grade within three hundred sixty-five (365) days of abandonment or decommissioning. An extension may be granted by the Township if a good faith effort has been demonstrated and any delay is not the result of actions or inaction of the operator. An alternative topography can be approved by the township-Township as part of the original site plan review or later as part of decommissioning.

8. Land Balancing: If land balancing is required, all top soil will be saved and spread evenly over balanced area.

44.9. Township Action: The Township may remove any abandoned or unsafe Utility Wind Energy Conversion Facility components that are not removed or restored within the allowed time. The owner, operator, and property owner shall be jointly and severally responsible for any costs.

10. Attorney Costs: The applicant-owner, operator, and property owner shall be responsible for the payment of all attorney fees and other costs incurred by the township-Township in the event that the structure is not voluntarily removed and the township-Township has to enforce removal.

11. Vegetation: Disturbed land shall be revegetated at the next appropriate planting season.

12. Disposal: All structures, equipment, and waste shall be removed from the site and disposed of properly.

H. Application Materials: Applications for Utility Wind Energy System-Conversion Facility Facilities must submit the following additional materials with the Special Land Use Application. These are in addition to information required for site plan and special use permit applications.

42.1. Identification: Applicant's-The name and address in full of the applicant, developer, owner, operator and property owners, a statement that the applicant is the owner involved in the application (substitution may include a legal description or parcel identification number(s)), any lease agreements, easements. Or purchase agreements for the subject parcels, and any additional contact information shall be submitted. Each application for a Wind Energy System Facility shall also be dated to indicate the date the application is submitted to Marion Township.

43.2. Purchase Agreements or Leases: Copies of all purchase agreements or leases for all participating properties that confirm An affidavit or evidence of an agreement between the lot owner or operator confirming the owner or operator applicant has the permission of the participating property owners to apply for the necessary approvals and permits for construction and operation of a Utility Wind Energy System-Conversion Facility.

3. Project Description: A general description of the proposed project including a legal description of the property or properties on which the project would be located and an

anticipated construction schedule, including name-plate generating capacity and an anticipated construction schedule shall be submitted.

- 44.4. Wind Turbines and Equipment: A complete description of the proposed technology to be installed at the Wind Energy System Facility to include type of wind turbine and its manufacturer, electrical generation capacity of each wind turbine, total number of wind turbines to be installed, and average distance between each wind turbine.
- 45.5. Conceptual Plan: A graphical computer-generated depiction of how the Wind Energy System will appear from all directions shall be submitted.
6. Documentation: A complete set of photos and video of the entire development area prior to construction as it exists before the application date.
7. Operation: A Description-description of operations, including anticipated regular and unscheduled maintenance and the hours of the day maintenance will take place shall be submitted.
8. Power Purchase Agreement: A copy of the applicant's power purchase agreement or other written agreement with an electric utility showing approval of an interconnection with the proposed Utility Wind Energy System Conversion Facility shall be submitted.
- 46.9. Insurance: Proof of the general liability insurance to cover the Utility Wind Energy Conversion Facility, the Township, and the landownerparticipating property owners shall be submitted.
10. Certifications: Certification shall be submitted that applicant-the Utility Wind Energy Conversion Facility will comply with all applicable state and federal laws and regulations in effect at the time the application is submitted, including, but not limited to: Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act; (MCL 324.3101 et. seq.; Part 91, Soil Erosion and Sedimentation Control (MCL 324.9101 et. seq.) and any corresponding County ordinances; Part 301, Inland Lakes and Streams, (MCL 324.30101 et. seq.); Part 303, Wetlands (MCL 324.30301 et. seq.); and Part 365, Endangered Species Protection (MCL324.36501 et. seq.).
11. Farmland Preservation Approval: Land-Utility Wind Energy Conversion Facilities with any participating properties that are enrolled in the Michigan Farmland Preservation program must provide confirmation of approval from the Michigan Department of Agriculture to locate a Wind Energy System Facility on the property before issuance of a certificate of zoning compliancethe facility on the property.
12. Road Agencies: The applicant must also obtain a permit from the Livingston County Road Commission (LCRC) or Michigan Department of Transportation (MDOT) for permission to connect access roads to existing County roads and from the Livingston County Drain Commission (LCDC) for any culverts or other drainage facilities. Proof of approval or conditional approval by any road agency from which the Utility Wind Energy Conversion Facility will have access or whose roads will be used as a construction or maintenance route shall be submitted.Livingston County Road Commission and Drain Commission
13. Drain Commission: Proof of approval or conditional approval by Livingston County Road Commission andand the Livingston County Drain Commission for any Utility Wind

Energy Conversion Facility that has participating properties with a county drain or propose improvements within a county drain easement.

14. Manufacturers' Safety Data Sheet(s): Documentation include the type and quantity of all materials used in the operation of all equipment shall be submitted.
- 17.15. Wildlife Impact: Copy of the Wildlife Impact Analysis shall be submitted.
- 18.16. Environmental Impact: Copy of the Environmental Impact Analysis shall be submitted.
17. Soil Chemical Analysis: A chemical analysis and borings including a Cation Exchange Capacity (CEC) of the soil involved in the project must be completed as recommended by the township-Township engineer ~~to establish a baseline to be used for future soil testing result comparisons for organic and inorganic compounds levels.~~
18. Complaint Resolution Protocol: Copy of Complaint Resolution Protocol shall be submitted.
19. Decommissioning Plan: Copy of the decommissioning plans and a description of how any surety bond is applied to the decommissioning process shall be submitted.
- 19.20. Emergency Action Plan: Copy of a the Emergency Action plan for the actions to be taken in event of an emergency. The emergency action plan must include a fire suppression plan, including the technology to be used and the training and equipment to be provided to township or other firefighters before the facility becomes operational. The emergency action plan must include plans for immediate cleanup and long-term aftermath efforts following an emergency shall be submitted.
21. Indemnification: An attestation that the applicant, owner, operator, and property owners will indemnify and hold the Township harmless from any costs or liability arising from the approval, installation, construction, maintenance, use, repair, or removal of the Utility Wind Energy System Conversion Facility, which is subject to the Township's review and approval, shall be submitted.
22. Right-to-Enter: Submission of an application for a Utility Wind Energy Conversion Facility grants the Township and its agents shall have the right upon issuing any to enter the facility and any participating property for inspection of the Utility Wind Energy Conversion Facility at any Wind Energy System Facility Special Use Permit to inspect the premises on which each Wind Energy System Facility is located at any reasonable time. The township-Township may hire a consultant to assist with any such inspections at a reasonable cost to be charged to the operator-of the Wind Energy System Facility.
23. Additional Information: Any additional information, studies, or documentation requested by the Planning Commission, Township Board, or other Township representative Township or its agents that are deemed necessary to determine compliance with this Ordinance and other applicable laws and regulations.
24. Application Fee: Review fees shall be submitted for a Land Use Permit application. Special Use Permit application, site plan review, and required escrow fee to the township in the amount specified in the fee schedule adopted by the Board of Trustees. This shall include, but not be limited to, independent review by experts, as deemed necessary by the Planning Commission.

I. Utility Wind Energy Systems Conversion Facilities under PA 233: On or after November 29, 2024, once PA 233 of 2023 is in effect, the following provisions apply to Utility Wind Energy Systems Conversion Facilities with a nameplate capacity of one hundred (50/100) megawatts or more and an energy discharge capability of 200 megawatt hours or more. To the extent these provisions conflict with the other provisions in §17.37 Utility Wind Energy Conversion Facilities subsections A–C above, these provisions control ~~as to such Wind Energy Systems~~. This subsection does not apply if PA 233 of 2023 is repealed, enjoined, or otherwise not in effect, and does not apply to ~~Battery Energy Storage Systems with a nameplate capacity of less than 50 megawatts or an energy discharge capability of fewer than 200 megawatt hours~~ Utility Wind Energy Conversion Facilities with a nameplate capacity of less than one hundred (100) megawatts. All provisions in ~~subsections A–C §17.37 Utility Wind Energy Conversion Facilities above~~ that do not conflict with this subsection remain in full force and effect.

20.1. Setbacks–: Utility Wind Energy Systems Conversion Facilities must comply with the ~~following~~ minimum setback requirements in the table below, with setback distances measured from the nearest edge of the perimeter fencing of the facility.

Setback Description	Setback Distance
Occupied community buildings and dwellings on nonparticipating properties	300 feet from the nearest point on the outer wall
Public road right-of-way	50 feet measured from the nearest edge of a public road right-of-way
Nonparticipating parties	50 feet measured from the nearest shared property line

21. Installation– ~~The Wind Energy System must comply with the version of NFPA 855 “Standard for the Installation of Stationary Energy Storage Systems” in effect on the effective date of the amendatory act that added this section or any applicable successor standard.~~

22.2. Noise Sound–: The Utility Wind Energy System Conversion Facility must not generate a maximum sound in excess of fifty-five (55) average hourly decibels as modeled at the nearest outer wall of the nearest dwelling located on an adjacent nonparticipating property. Decibel modeling shall use the A-weighted scale as designed by the American National Standards Institute.

23.3. Lighting–: The Utility Wind Energy System Conversion Facility must implement dark sky-friendly lighting solutions.

24.4. Environmental Regulations–: ~~The Utility Wind Energy System Conversion Facilities~~ must comply with applicable state or federal environmental regulations.

5. Host community Community agreement Agreement–: The applicant shall enter into a host community agreement with the Township. The host community agreement shall require that, upon commencement of any operation, the Utility Wind Energy System Conversion Facility owner must pay the Township two thousand dollars (\$2,000.00) per megawatt of nameplate capacity. The payment shall be used as determined by the Township for police, fire, public safety, or other infrastructure, or other projects as agreed to by the ~~local unit~~ Township and the applicant.

6. PA 233 Requirements: The Utility Wind Energy Conversion Facility shall be subject to the other applicable rules and regulations outlined in PA 233 of 2023 and by the Michigan Public Service Commission.

~~25.7.~~ Applicant's Option: An applicant can elect at the time of application to have their application for a Utility Wind Energy Conversion Facility processed using the other provisions of §17.37 Utility Wind Energy Conversion Facilities, even if PA 233 of 2023 is in full effect.

Section 2. Addition of Definitions to §3.02 Definitions

§3.02 *DEFINITIONS IS AMENDED BY THE ADDITION OF THE FOLLOWING ADDITIONS, TO BE ADDED IN ALPHABETICAL ORDER, WHICH SHALL READ AS FOLLOWS:*

~~Battery Management System: An electronic regulator that manages a Wind Energy System by monitoring individual battery module voltages and temperatures, container temperature and humidity, off-gassing of combustible gas, fire, ground fault and DC surge, and door access and capable of shutting down the system before operating outside safe parameters.~~

~~Wind Energy Systems: One or more devices, assembled together, capable of storing energy in order to supply electrical energy, including battery cells used for absorbing, storing, and discharging electrical energy in a Wind Energy System ("BESS") with a battery management system ("BMS").~~

~~Wind Energy System: A physical container providing secondary containment to battery cells that is equipped with cooling, ventilation, fire suppression, and a battery management system.~~

Cation Exchange Capacity (CEC): ~~is the~~The total capacity of a soil to hold exchangeable cations. CEC is an inherent soil characteristic and is difficult to alter significantly. It influences the soil's ability to hold onto essential nutrients and provides a buffer against soil acidification.

Inorganic Compound: ~~any~~Any substance in which two or more chemical elements (usually other than carbon) are combined, nearly always in definite proportions, either naturally occurring or manmade.

Organic Compound: ~~a~~A large class of chemical compounds in which one or more atoms of carbon are covalently linked to atoms of other elements, most commonly hydrogen, oxygen, or nitrogen, either naturally occurring or manmade.

Swept Area: The area that is swept by the wind turbine blade.

Utility Wind Energy Conversion Facility: A facility with one (1) or more wind turbines that convert wind energy to electrical energy, including all appurtenant structures and infrastructure, that has a nameplate capacity of one hundred (100) kilowatts or more.

Wind Turbine Height: The vertical distance between the ground and the highest point of the swept area.

Section 3. Amendments to §12.01 Solar Farm Overlay District

§12.01(B) PERMITTED ACCESSORY USES IS AMENDED BY THE ADDITION OF A NEW §12.01(B)(2), WHICH SHALL READ AS FOLLOWS:

2. Accessory uses or structures clearly incidental to the operation of an approved Utility Wind Energy ~~System~~Conversion Facility.

§12.01(C) USES PERMITTED BY SPECIAL USE PERMIT IS AMENDED BY THE ADDITION OF A NEW §12.01(C)(2) [SIC], WHICH SHALL READ AS FOLLOWS:

2. Utility Wind Energy ~~Systems~~Conversion Facilities.

Section 4. Severability and Validity.

If any portion of this Ordinance is found invalid for any reason, such holding will not affect the validity of the remaining portions of this Ordinance.

Section 5. Repealer.

All other ordinances inconsistent with the provisions of this Ordinance are hereby repealed to the extent necessary to give this Ordinance full force and effect.

Section 6. Effective Date.

This Ordinance takes effect upon the expiration of 7 days after publication as required by MCL 125.3401(7).

Article XVII: Standards for Specific Special Land Uses

Section 1- Amendments to Article XVII Standards for Specific Special Land Uses

ARTICLE XVII STANDARDS FOR SPECIFIC SPECIAL LAND USES IS AMENDED BY THE AMENDMENT OF SECTION 17.35, WHICH SHALL READ AS FOLLOWS:

Section 17.38 Utility-Scale Battery Energy Storage Facilities

A. Intent and Purpose

The intent and purpose of this section is to establish standards for the siting, installation, operation, repair, decommissioning, and removal of Utility-Scale Battery Energy Storage Facilities; establish the process for the reviewing and permitting of such facilities; protect the health, welfare, safety, and quality of life of the general public; and ensure compatibility with land uses in the vicinity of the areas affected by such facilities.

B. Locational Requirements

1. Utility-Scale Battery Storage Facilities are subject to the locational requirements below.
 - a. Utility-Scale Battery Energy Storage Facilities are permitted by special use permit in the SFO Solar Farm Overlay District.
 - b. The site may consist of a single participating property or multiple adjoining participating properties.

C. Site Requirements

1. Utility-Scale Battery Energy Storage Facility sites shall meet the site standards below.
 - a. Site Composition: The site may consist of a single participating property or multiple adjoining participating properties. All participating properties must have signed agreements to participate in the Utility-Scale Battery Storage Facility.
 - b. Lot Area: The site shall have a total net lot area of at least forty (40) acres and no more than one thousand (1000) acres.
 - c. Access: Utility-Scale Battery Energy Storage Facilities shall meet the access standards below.
 1. Road or Easement: The site, all fenced compounds, and every solar array shall have direct access from a public road or an access easement with a maximum length of one thousand two hundred fifty (1,250) feet and width of at least thirty-three (33) feet.
 2. Access Drive Material: Access drives shall have a hard surface or material that can pack hard that is sufficient to support fire apparatus and provide access at all times of the year.
 3. Access Drive Maintenance: Access drives must be maintained and kept accessible at all times. The applicant, owner, operator, and property owners shall be jointly and severally responsible for maintenance of the access roads.
 4. Access Drive Design: Access drives shall be designed to reduce the impact on agricultural use of the land and the visual impact. Access drives shall not impede the natural flow of water.

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5. Gates and Doors: All access gates and doors to Utility-Scale Battery Energy Storage Facility compounds and electrical equipment shall be lockable and kept secured at all times when service personnel are not present.
- d. Setbacks: buildings containing batteries, fenced compounds, accessory structures, and electrical equipment shall meet the setback standards below.
1. Measurement: Setbacks from any battery buildings or accessory structures shall be measured horizontally from the edge of the building or component structure.
 2. Fences and Improved Areas: All fences and improved areas shall comply with the applicable setback for the underlying zoning district in which it is located.
 3. Fenced Compounds: All structures and improved areas located within the fenced compound shall be at least thirty (30) feet from the fence line.
 4. Utility-Scale Battery Energy Storage systems: Utility-Scale Battery Energy Storage systems and related accessory structures shall meet the setbacks in the table below.

Setback from	Distance
Non-participating property lines	100 feet
Occupied buildings on non-participating properties	500 feet
Occupied buildings on participating properties	500 feet
Lakes, rivers, creeks, and similar bodies of water and Wellhead Protection Areas	100 feet
Road rights-of-way	100 feet

- e. Height: Utility-Scale Battery Energy Storage components must not exceed a maximum height of twenty-five (25) feet above ground.
- f. Lighting: Lighting shall be limited to inverter or substation locations only and shall comply with §14.04(E) Lighting.
- g. Utility-Scale Battery Energy Storage Structures: Utility-Scale Battery Energy Storage structures within a Utility-Scale Battery Energy Storage Facility shall meet the design standards below.
1. Consistent: All Utility-Scale Battery Energy Storage systems and related accessory structures within the facility shall be of the same design and appearance.
 2. Good Condition: All Utility-Scale Battery Energy Storage systems and related accessory structures shall be maintained in good condition at all times, consistent with or better than industry standards.
 3. Certification: Utility-Scale Battery Energy Storage systems and related accessory structures shall be approved by the Institute of Electrical and Electronics Engineers (IEEE), International Electrotechnical Commission (IEC), or other similar certification organization.
- h. Wiring: All power transmission, communication, or other lines, wires, or conduits within a Utility-Scale Battery Energy Storage shall meet the standards below.

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1. Stray Voltage: All wiring shall comply with all applicable safety and stray voltage standards. Stray voltage originating from a Utility-Scale Battery Energy Storage Facility shall not be detected on any participating or non-participating properties
 - I. Preconstruction Test: A preconstruction stray voltage test shall be conducted on all Michigan Department of Agriculture & Rural Development (MDARD) registered livestock facilities located within a one-mile radius of all participating properties. The tests shall be performed by an investigator approved by the Township at the applicant's expense.
 - II. Report: A report of the tests shall be provided to the owners of all property included in the study area.
 - III. Permission: The applicant/landowner shall seek written permission from property owners prior to conducting testing. Testing shall not be required on non-participating properties where the owners have refused to grant permission to conduct the testing. The owner of any participating property included in the list of project parcels shall not refuse the stray voltage.
2. Underground: Wiring shall be underground, except for power switchyards or the area within a fenced substation. When the Township finds underground wiring is not feasible due to soil or water conditions the above-ground lines, transformers, or conductors should follow any Avian Power Line Interaction Committee (APLIC, <http://www.aplic.org/>) guidelines to prevent avian mortality.
3. Depth: Wiring shall be located at a depth to prevent any damage from freezing or frost, to prevent interference with drain tiles, and at a depth that complies with current National Electrical Code standards.
4. Interference: Wiring shall be located and designed to not cause interference with wired or wireless communication systems.
5. Armoring: Concrete armoring techniques shall be used at every location where wiring crosses a county drain, river, water line, or sewer line.
6. Marking: Permanent, visible markers or tracing wires shall be installed to indicate the location of wiring.
7. Drain Tiles: Wiring shall be located to minimize conflict with drain tiles.
- i. Drain Tiles: Drain tiles within the Utility-Scale Battery Storage Facility shall be preserved and maintained throughout the construction, operation, and restoration periods, as described below.
 1. Initial Inspection: Before the start of construction, all existing drain tiles within the facility and within any disturbed areas must be inspected by robotic camera with the imagery submitted to the Township for baseline documentation on tile conditions.
 2. Continuing Inspection: Drain tiles must be reinspected by robotic camera every three (3) years while the facility is in operation or when conditions indicate there may be damage to drain tiles with the imagery submitted to the Township.
 3. Repairs: Damage drain tiles shall be repaired within sixty (60) days of discovery. The Township shall be notified of any necessary repairs before the work commences and documentation of the repair work. Repairs necessary to address an emergency situation may be completed without prior notice to the Township.

Article XVII: Standards for Specific Special Land Uses

4. Inspection: The Township reserves the right to have a Township official or other agent present at the time of repair.
- j. Fire Suppression: A fire suppression system shall be provided that is specifically designed to immediately suppress and extinguish fires in any part of the Utility-Scale Battery Storage Facility, including the solar arrays, electrical equipment, and transformers.
 1. Documentation: Documentation shall be provided confirming the effectiveness of the fire suppression system and the results of a third-party independent inspection, as approved by the Township, of the fire suppression system.
 2. Fire Authority: The fire suppression system shall be reviewed and approved by the Township's fire authority.
 3. Annual Inspection: The fire suppression system shall be inspected and approved yearly by a third-party independent inspecting company that is approved by the Township.
- k. Groundcover: Utility-Scale Battery Storage Facilities shall include the installation of perennial ground cover vegetation that shall be maintained for the duration of operation until the site is decommissioned where appropriate within the site.
 1. PA 116 Lands: Land within the project area that are enrolled or bound by the Farmland Preservation Program must follow the Michigan Department of Agriculture and Rural Development (MDARD) Policy for Allowing Commercial Renewable Energy Development on PA 116 Lands.
 2. Non-PA 116 Lands: Land within the project that are not enrolled or bound by the Farmland Preservation Program must provide at least one (1) of the following types of dual-use ground cover to promote ecological benefits:
 - i. Pollinators: Pollinator habitat with a score of at least seventy-six (76) on the Michigan Pollinator Habitat Planning Scorecard for Solar Sites (www.pollinators.msu.edu);
 - ii. Conservation Cover: Conservation cover focused on restoring native plants, grasses, or prairie with the aim of protecting specific species, such as bird habitat, or providing specific ecosystem services, such as carbon sequestration or improving soil health;
 - iii. Grazing: Incorporation of rotational livestock grazing and forage production as part of an overall vegetative maintenance plan; or
 - iv. Crops: Raising crops for food, fiber, or fuel and generating electricity within the site to maximize land use.
 3. Alternative Ground Cover: The Township may approve or require alternative ground cover upon finding it is not feasible to provide groundcover as defined above.
 4. Ground Cover Nature: All ground cover must be native plants with substantial root systems to support soil. Turf grass is not permitted as ground cover.
 5. Invasives and Noxious: Invasive species and noxious weeds are not permitted and must be removed in a timely manner.
- l. Fencing Utility-Scale Battery Energy Storage Facility compounds shall be completely surrounded by a fence designed to prevent unauthorized access and to screen the facility.
 1. Height: The fence shall be at least seven (7) feet tall.

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2. Fence Posts: Fence posts shall extend at least thirty-six (36) inches into the ground, and gate posts and corner posts shall have a concrete foundation.
3. Fence Type: The fence shall be a woven agricultural-style fence. The Township may require or allow durable green opaque material to be integrated into the fence if necessary for buffering or screening.
4. Gate Access: Gates shall be provided at all access points, unless otherwise permitted or approved. Gates for vehicular access shall be approved by the Fire Authority.
5. Gate Type: Gates shall be the same height and constructed of the same material as the fencing. Access, such as Knox box, shall be provided for emergency responders.
6. Wildlife Considerations: The Township may require or allow a fence design to allow for the passage of wildlife upon a finding that adequate access control and visual screening will be preserved.
7. Alternate fencing may be approved by the Township upon a finding that the alternative provides adequate access control and visual screening.

m. Signage: Advertising or non-project related graphics shall be prohibited. This exclusion does not apply to signs required by this Ordinance.

1. Buffering Requirements

1. Utility-Scale Battery Energy Storage Facilities shall provide buffering described below.

a. Vegetative Buffer: There shall be a landscape buffer at least twenty (20) feet wide along the exterior of any fenced compound, whenever existing natural vegetation does not otherwise reasonably obscure the fenced compound.

1. Design: The buffer shall have two (2) rows of staggered evergreen trees planted twelve (12) feet apart or less trunk-to-trunk. The two (2) rows shall be ten (10) feet apart. The Township may consider an alternative landscape buffer as a part of special use permit approval, provided the alternative buffer provides adequate screening.

2. Vegetation Size: Plantings shall be at least eight (8) feet tall at time of planting, measured from the top of the root ball to the base of the leader, not including the height of the leader, and must be a species that can reasonably be expected to reach a height of ten (10) feet within three (3) growing seasons.

3. Maintenance: The trees may be trimmed but must maintain a height of at least eighteen (18) feet. Damaged or diseased trees shall be replaced at the next appropriate planting season.

4. Evergreen Species: Evergreen trees shall be Norway Spruce in the row closest to fence and Thuja Green Giant Arborvitae in the row away from the fence. The Township may consider alternative evergreen species as part of special use permit approval, provided the alternative species are more appropriate for the local conditions.

b. Buffer Maintenance: Good arboricultural techniques shall be followed with respect to vegetation, including, but not limited to, proper pruning, proper fertilizing, and proper mulching, so that the vegetation will reach maturity as soon as practical and will have maximum density in foliage. Dead or diseased vegetation shall be removed and must be replanted in a manner consistent with these standards at the next appropriate planting season.

E. Performance Standards

1. Utility-Scale Battery Storage Facilities shall meet the performance standards below.

Article XVII: Standards for Specific Special Land Uses

- a. Compliance: Utility-Scale Battery Storage Facilities shall be designed, constructed, operated, and maintained in compliance with all applicable provisions of local, state, and federal laws and regulations and industry standards.
- b. Sound: The sound generated by a Utility-Scale Battery Storage Facilities must meet the sound standards of this Ordinance and the additional standards below.
1. Day Sound Level: The maximum sound level shall be forty (40) Dba Lmax, as measured at the project boundary and road rights-of-way between the hours of 7:00 am and 9:00 pm.
 2. Night Sound Level: The maximum sound level shall be thirty-five (35) Dba Lmax, as measured at the project boundary and road rights-of-way between the hours of 9:00 pm and 7:00 am.
 3. Pure Tone: If pure tones are produced, the maximum sound level shall be reduced by five (5) Dba.
 4. Ambient Sound: If the ambient sound levels exceed these standards, the maximum sound level shall be the ambient sound level plus five (5) Dba.
 5. Inverter Sound Screening: A sound barrier of a solid decorative masonry wall or evergreen tree berm, with trees spaced not less than ten (10) feet apart, must be constructed to reduce noise levels surrounding all inverters. Berms must be within ten (10) feet of all inverters and must be at least as tall as all inverters but cannot be more than three (3) feet taller than the height of the adjacent inverters.
 6. Continued Compliance: The sound level by a Utility-Scale Battery Storage Facility must be inspected every three (3) years, at the operator's expense, by an auditory expert to ensure compliance with applicable sound standards.
- c. Airport Impact: Utility-Scale Battery Storage Facilities must be reviewed using the current Solar Glare Hazard Analysis Tool (SGHAT) available through Sandia National Laboratories or a commercially-available equivalent. The SGHAT will be used to ensure that airports and those who use them will not be affected by unwanted visual or ocular impacts. The process is designed to save costs and increase public safety.
1. Adverse Impacts: The study shall determine if there are any potential adverse effects on any registered airfield within ten (10) miles of the project. Effects noted, but not exclusively, should include any possible decreased safety and utility.
 2. Determination of No Hazard: Utility-Scale Battery Storage Facilities must obtain a Determination of No Hazard (from the Federal Aviation Administration). A Determination of No Hazard does not eliminate the need for the SGHAT study, nor does it in any way eliminate the standard for glare on roadways or non-participating parcels.
 3. Timing: The Determination of No Hazard must be obtained before breaking ground on any portion of the Utility-Scale Battery Storage Facility. A copy must be submitted to the Township.
 4. Safety and Utility Impacts: Utility-Scale Battery Storage Facilities that impacts safety or utility of any registered airfield shall not be permitted.
- d. Reports: In addition to other reports identified in this Ordinance, the owner or operation shall submit the following reports during the operation of Utility-Scale Battery Storage Facilities.
1. Annual Report: An annual report shall be provided to the zoning administrator showing continuity of operation.

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2. Operation. A report shall be provided to the zoning administrator if the Utility-Scale Battery Storage Facility or any of its components are no longer being used. .

3. Incident Report: Reports shall be submitted if there is a major incident at the Utility-Scale Battery Storage Facility that did or could have caused harm to life or property, including calls for service from emergency responders. The report shall identify the cause of the incident and corrective action to prevent future incidents of that nature.

e. Safety: Utility-Scale Battery Storage Facilities shall be subject to the safety standards below.

1. Warning Signs: The manufacturer's or installer's identification and appropriate warning signs shall be posted on or near each solar array and electrical equipment in a clearly visible manner.

2. Fire Suppression and Data Sheets: Fire suppression plans and Safety Data Sheets shall be kept onsite and be accessible for emergency responders.

3. Safety Manual: An unredacted copy of the manufacturer's safety manual for each component of the Utility-Scale Battery Storage Facility, without distribution restraints, will be provided before construction commences. These will be kept at the Township Hall and other locations deemed necessary by the Township or local first responders. The manual should include standard details for an industrial site such as materials, chemicals, fire, access, safe distances during a Utility-Scale Battery Storage Facility failure, processes in emergencies, etc.

f. Interference: Utility-Scale Battery Storage Facilities must not interfere with any radio, television, or other communication systems. The applicant or operator must resolve any known interference immediately and provide proof that the interference has been resolved within ninety (90) days.

g. Complaint Resolution: Utility-Scale Battery Storage Facilities shall provide a complaint resolution process, as described below.

1. Signs: Signs with contact information to report complaints related to the Utility-Scale Battery Storage Facility shall be posted throughout the project area. Signs shall be posted before construction begins and maintained until decommissioning is complete.

2. Resolution Options: Any resolution shall include lawful and reasonable solutions consistent with this Ordinance.

3. Contact: A twenty-four hour (24) hour, toll free number shall be established the owner or operator to receive complaints. Additional reporting methods, such as postal mail or electronic mail, may also be used.

4. Log: A log shall be kept by the owner or operator of all complaints received and documentation of the resolution. The log shall be available for review by Township Officials.

5. Notification: The zoning administrator shall receive notification of all complaints received. An annual report shall be submitted to the Township that details all complaints received, the status of complaint resolution, and actions taken to resolve complaints.

6. Resolution Period: Complaints for hazardous conditions shall be resolved within twelve (12) hours or as soon as reasonable possible. Other complainants shall be resolved within ten (10) business days . The zoning administrator shall receive notification of all complaints received.

7. Adjudication: The operator or its assigns reserve the right to adjudicate any claims, including residential claims, in a court of competent jurisdiction.

h. Insurance and Performance Guarantees: Utility-Scale Battery Storage Facilities shall provide insurance and performance guarantees. These are in addition to other insurance or performance guarantees required by this Ordinance or other entities.

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1. General Liability Insurance: Utility-Scale Battery Storage Facilities shall have and maintain general liability insurance of at least ten million (\$10,000,000) dollars. The Township may require a higher amount for larger projects and may allow for a lesser amount for smaller projects upon a finding that the alternate amount is more consistent with the likely risk.
2. General Maintenance Performance Guarantee: A General Maintenance Performance Guarantee shall be provided before construction commences to guarantee all aspects of this Ordinance are met at all times during the construction and operation of the Utility-Scale Battery Storage Facility. At the time of the application, the applicant shall submit two (2) third-party contractor bids for construction of all fencing, landscaping, and drainage improvements associated with the Utility-Scale Battery Storage Facility, and the performance guarantee shall be the higher of the two (2) bids. The Township may use the performance guarantee to repair any landscaping, fencing, drainage infrastructure (including drainage tiles), and/or to correct any ongoing violation of this Ordinance in the event that the site improvements for the Utility-Scale Battery Storage Facility is not maintained or the Utility-Scale Battery Storage Facility fails to make operational changes to correct an operational violation.
3. Road Performance Guarantee: A road performance guarantee shall be provided before construction comments in a form acceptable to the Township, such as: a) a surety bond from a surety listed as acceptable on the Federal Surety Bond circular 570 of the U.S. Department of Treasury; or b) an acceptable irrevocable letter of credit; or c) an escrow account established in a financial institution licensed in the State of Michigan. A construction bond shall not be accepted. The amount of the performance guarantee shall be at least one million two hundred fifty thousand dollars (\$1,250,000), but this amount may be increased if the third-party consultant determines the amount needed for road repairs is greater than this amount. The performance guarantee shall only be released, in whole or part, when the Township Board, in consultation with the Livingston County Road Commission and Michigan Department of Transportation, as applicable, and the third-party inspector, determines that all required road work has been completed and approved by the affected road agencies. The Township may waive the requirement for this performance guarantee if the road agencies collect a performance guarantee.
4. Complaint Inspection Escrow: An escrow account, funded by the applicant, owner, or operator, to be used for investigation of complaints shall be established before construction commences. The escrow account shall be used by the Township for investigation of complaints, including reasonable reimbursement of qualified third-party agents, for, but not limited to, glare, stray voltage, sound, and signal interference. The escrow account shall be kept with the Township Treasurer. The initial escrow account shall be in the amount of fifteen thousand dollars (\$15,000)). When the escrow account balance is below five thousand dollars (\$5,000), the Township shall notify the responsible party, who must replenish the escrow account to the amount of fifteen thousand (\$15,000) within a period of forty-five (45) calendar days.
 - i. Dust Control: Reasonable dust control measures shall be taken during construction and operation.
 - j. Plants and Grasses: Plants or grasses not part of the buffer area shall be maintained at a height of twelve (12) inches or less. The Township may approve a taller height upon a finding that it will not result in a nuisance.
 - k. Wildlife: Utility-Scale Battery Storage Facilities shall be designed, sited, and operated in a manner to minimize impact on wildlife.

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1. Wildlife Impact Analysis: The applicant shall have a third-party qualified professional, acceptable to the Township, conduct an analysis to identify and assess any potential impacts on wildlife and endangered species. At a minimum, the analysis shall include a thorough review of existing information regarding species and potential habitats in the vicinity of the project area. Where appropriate, surveys for bats, raptors, or general avian use should be conducted. The analysis shall include the potential effects on species listed under the federal Endangered Species Act and Michigan's Endangered Species Protection Law.
 2. Adverse Impacts: Appropriate measures shall be taken to minimize, eliminate, or mitigate adverse impacts identified in the analysis. The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.
 3. Special Scrutiny: Sites requiring special scrutiny include wildlife refuges, other areas where birds are highly concentrated, bat hibernacula, wooded ridge tops that attract wildlife, sites that are frequented by federally- or state-listed endangered species of birds and bats, significant bird migration pathways, and areas that have landscape features known to attract large numbers of raptors.
 4. US Fish and Wildlife Service. The applicant shall follow all pre-construction and post-construction recommendations of the United States Fish and Wildlife Service.
 5. Post-Construction Mortality Study: A post-construction wildlife mortality study may be required. The analysis should indicate if such a study is determined unnecessary and the reasons why such a study does not need to be conducted. All above-ground lines, transformers, or conductors should follow any Avian Power Line Interaction Committee (APLIC, <http://www.aplic.org/>) guidelines to prevent avian mortality.
- I. Environment: Utility-Scale Battery Storage Facilities shall be designed, sited, and operated to minimize impact on the environment.
1. Environmental Impact Analysis: The applicant shall have a third-party qualified professional, acceptable to the Township, conduct an analysis to identify and assess any potential impacts on the natural environment including, but not limited to, wetlands and other fragile ecosystems, historical and cultural sites, and antiquities.
 2. Adverse Impacts: Appropriate measures shall be taken to minimize, eliminate, or mitigate adverse impacts identified in the analysis. The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.
 3. Environmental Laws: Utility-Scale Battery Storage Facilities shall comply with applicable parts of the Michigan Natural Resources and Environmental protection Act (Act 451 of 1994, MCL 324.101 et seq.), Part 91 Soil Erosion and Sedimentation Control (MCL 324.9101 et seq.), Part 301 Inland Lakes and Streams (MCL 324.30101 et seq.), Part 303 Wetlands (MCL 324.30301 et seq.), Part 323 Shoreland Protection and Management (MCL 324.32301 et seq.), Part 325 Great Lakes Submerged Lands (MCL 324.32501 et seq.), and Part 353 Sand Dunes Protection and Management (MCL 324.35301 et seq.).
 4. Containment System: A containment system shall surround any transformers in case of hazardous waste or oil spills.
 5. Removal: All solid and hazardous waste materials shall be promptly removed from the site and disposed of properly.
 6. Responsibility: The Utility-Scale Battery Storage Facility owner, operator, and property owner shall be responsible, jointly and severally, for mitigating erosion, flooding, and all other environmental impacts resulting from the Facility.

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- m. Emergency Action Plan: Utility-Scale Battery Storage Facilities shall have an Emergency Action Plan to identify actions to be taken in event of an emergency.
1. Fire Suppression: The Emergency Action Plan must include a fire suppression plan, including the technology to be used and the training and equipment to be provided to Township or other firefighters before the facility becomes operational.
 2. Special Equipment and Training: The Emergency Action Plan shall identify special equipment and training that is required for emergency response to the Utility-Scale Battery Storage Facility.
 3. Clean-up: The emergency action plan must include plans for immediate cleanup and long-term aftermath efforts following an emergency.
 4. Emergency Training: Before the The Utility-Scale Battery Storage Facility is operational, it must provide the necessary training, equipment, or agreements specified in the Emergency Action Plan to the Township or other emergency personnel. All training must be consistent with current industry standards.
 5. Public Record: The Emergency Action Plan will be a public record.

F. General Provisions

1. Utility-Scale Battery Storage Facilities shall be subject to the general provisions below.
 - a. Damage Repair: The Utility-Scale Battery Storage Facility owner, operator, and property owner shall be responsible, jointly and severally, for making repairs to any public roads, drains, and infrastructure damaged by the construction of, use of, maintenance of, or damage to, a The Utility-Scale Battery Storage Facility.
 - b. Mixed Facilities: Utility-Scale Battery Storage Facilities may be collocated with other renewable energy facilities, such and Utility Battery Energy Storage Facilities or Utility Wind Energy Conversion Facilities. Review and approval are required for each use.
 - c. As-Builts: The applicant shall submit an as-built drawing with dimensions relative to property lines of all new structures including turbines and buried cable both inside and outside fenced areas upon completion and before any power is supplied to the grid. The as-built drawing shall be a scale of 1" = 200 feet.
 - d. Repowering or Modifications: Any modifications of an approved site plan or special use permit that are made after the initial date of approval, including, but not limited to, an expansion of project, repowering, reconfiguration, technological updates, shall require new site plan and special use permit applications. Any changes of the approved site plan or special use permit will be subject to this Ordinance as it exists at time of this new application.
 - e. Transfer or Sale: In the event of a transfer or sale of a Utility-Scale Battery Storage Facility, the new owner or operator must notify the Township within thirty (30) days, and the zoning administrator shall administratively amend the permit to name the new owner or operator. Upon transfer or sale, the cash bond shall be transferred to the new owner or operator and shall be maintained at all times, the estimated costs of decommissioning shall be resubmitted, and the security bond adjusted to account for the new estimate.

G. Decommissioning, Abandonment, and Restoration

1. Following the operational life or abandonment of a Utility-Scale Battery Storage Facility, the site shall be decommissioned and restored as outlined below.
 - a. Decommissioning Plan: The applicant shall have a third-party qualified professional, acceptable to the Township, prepare a decommissioning plan. The decommissioning plan shall be written to provide security to the township for one hundred twenty-five percent (125%) of the cost to remove and dispose of all panels, wiring, and restoration

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of the land to its original conditions. The decommissioning security shall be paid in cash to the Township. Once value of decommissioning is determined, it shall be updated on a periodic basis of not less than every three (3) years and additional security may be required on the basis of the average inflation rate of the preceding three (3) years.

1. Anticipated Life: The decommissioning plan shall describe the anticipated life span of the Utility-Scale Battery Storage Facility and its components.
 2. Decommissioning Costs: The decommissioning plan shall provide a probable cost estimate for decommissioning, including current cost and cost at the time of decommissioning.
 3. How Paid: The decommissioning plan shall provide a description of how decommissioning costs will be paid.
 4. Regular Updating: The decommissioning plan shall be updated on a regular, period basis at of at least once every three (3) years.
- b. Abandonment: Utility-Scale Battery Storage Facilities or any components that are not operated for a continuous period of six (6) months shall be considered abandoned, whether or not there is an intent to continue the use, and shall be removed or restored to operation.
 - c. Damage: Any Utility-Scale Battery Storage Facility components that are damaged shall be replaced or removed within seven (7) days. An extension may be granted by the Township upon finding that it is not feasible to replace or remove the component in that period and that the delay does not create a hazardous condition.
 - d. Unsafe: Any unsafe components shall be removed or made safe within a reasonable period as determined by the Township.
 - e. Compaction Prevention: All abandonment and decommissioning work must be done when soil is dry or frozen to prevent compaction.
 - f. Chemical Analysis and Boring: A chemical analysis and boring of the soil, as recommended by the Township engineer shall be performed before any decommissioning work begins with the results compared to the baseline soil chemical analysis baseline test results obtained before construction of the Utility-Scale Battery Storage Facility.
1. Chemical Levels: All levels of any chemical entity found in the soil chemical analysis must be equal to or are lower than the levels of all chemical entities determined in the baseline testing performed prior to construction. If a new chemical entity, either organic or inorganic compounds, are identified in the soil chemical analysis, its level must be below established federal and state government levels for hazardous materials in soils for that chemical entity.
 2. Report: A report of the soil chemical analysis must be provided to the Township within seven (7) days. If any chemical entity, organic or inorganic compounds, are above established federal and state government levels for hazardous materials in soils, the report must be submitted to the appropriate Federal and State regulatory agencies within seven (7) days of receiving the testing report showing a violation.
 3. Violation Mitigation: Once a violation has been determined and finalized, a reclamation plan for the contaminated soil must be developed and implemented to remove the contaminated soil from the Utility-Scale Battery Storage Facility site. The reclamation plan must meet all Federal and State regulations for the reclamation of a contaminated site. The plan must be approved by the Township Board and the Township engineer. Once the contaminated soil has been removed and replaced with uncontaminated soil, a final soil chemical analysis shall be performed to confirm the Utility-Scale Battery

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Storage Facility site soils have been returned to its original state for levels of organic and inorganic compounds that existed before construction.

4. Cation Exchange Capacity. A Cation Exchange Capacity soil test shall also be required at the completion of the decommission process.

5. Violation Mitigation 2: Any negative variations from the preconstruction soil testing must be remedied and the final results of the testing approved by the township engineer and the Township Board.

- g. Ground Restoration: The ground must be restored to its original topography and land must be restored to a depth of three (3) feet below grade within three hundred sixty-five (365) days of abandonment or decommissioning. An extension may be granted by the Township if a good faith effort has been demonstrated and any delay is not the result of actions or inaction of the operator. An alternative topography can be approved by the Township as part of the original site plan review or later as part of decommissioning.

- h. Land Balancing: If land balancing is required, all top soil will be saved and spread evenly over balanced area.

- i. Township Action: The Township may remove any abandoned or unsafe Utility-Scale Battery Storage Facility components that are not removed or restored within the allowed time. The owner, operator, and property owner shall be jointly and severally responsible for any costs.

- j. Attorney Costs: The owner, operator, and property owner shall be responsible for the payment of all attorney fees and other costs incurred by the Township in the event that the Township has to enforce removal.

- k. Vegetation: Disturbed land shall be revegetated at the next appropriate planting season.

- l. Disposal: All structures, equipment, and waste shall be removed from the site and disposed of properly.

H. Application Materials

1. Applications for Utility-Scale Battery Storage Facilities must submit the following additional materials with the Special Land Use Application. These are in addition to information required for site plan and special use permit applications.

- a. Identification: The name and address in full of the applicant, developer, owner, operator and property owners, a statement that the applicant is the owner involved in the application (substitution may include a legal description or parcel identification number(s)), any lease agreements, easements. Or purchase agreements for the subject parcels, and any additional contact information shall be submitted. Each application for a Utility-Scale Battery Storage Facility shall also be dated to indicate the date the application is submitted to Marion Township.

- b. Purchase Agreements or Leases: Copies of all purchase agreements or leases for all participating properties that confirm the applicant has the permission of the participating property owners to apply for the necessary approvals and permits for construction and operation of a Utility-Scale Battery Storage Facility.

- c. Project Description: A general description of the proposed project, including name-plate generating capacity and an anticipated construction schedule shall be submitted.

- d. Solar Arrays: A complete description of the proposed technology to include type of solar panel and system, maximum height, fixed mounted versus tracking, number of panels, and angles of orientation.

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- e. Conceptual Plan: A graphical computer-generated depiction of how the Utility-Scale Battery Storage Facility will appear from all directions shall be submitted.
- f. Documentation: A complete set of photos and video of the entire development area as it exists before the application date.
- 5 g. Operation: A description of operations, including anticipated regular and unscheduled maintenance and the hours of the day maintenance will take place shall be submitted.
- h. Power Purchase Agreement: A copy of the power purchase agreement or other written agreement with an electric utility showing approval of an interconnection with the proposed Utility-Scale Battery Storage Facility shall be submitted.
- 10 i. Insurance: Proof of the general liability insurance to cover the Utility-Scale Battery Storage Facility, the Township, and the participating property owners shall be submitted.
- 15 j. Certifications: Certification shall be submitted that the Utility-Scale Battery Storage Facility will comply with all applicable state and federal laws and regulations in effect at the time the application is submitted, including, but not limited to: Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act; (MCL 324.3101 et. seq.; Part 91, Soil Erosion and Sedimentation Control (MCL 324.9101 et. seq.) and any corresponding County ordinances; Part 301, Inland Lakes and Streams, (MCL 324.30101 et. seq.); Part 303, Wetlands (MCL 324.30301 et. seq.); and Part 365, Endangered Species Protection (MCL324.36501 et. seq.).
- 20 k. Farmland Preservation Approval: Utility-Scale Battery Storage Facilities with any participating properties that are enrolled in the Michigan Farmland Preservation program must provide confirmation of approval from the Michigan Department of Agriculture to locate the facility on the property.
- 25 l. Road Agencies: Proof of approval or conditional approval by any road agency from which the Utility-Scale Battery Storage Facility will have access or whose roads will be used as a construction or maintenance route shall be submitted.
- m. Drain Commission: Proof of approval or conditional approval by and the Livingston County Drain Commission for any Utility-Scale Battery Storage Facility that has participating properties with a county drain or propose improvements within a county drain easement.
- 30 n. Manufacturers' Safety Data Sheet(s): Documentation include the type and quantity of all materials used in the operation of all equipment shall be submitted.
- o. Wildlife Impact: Copy of the Wildlife Impact Analysis shall be submitted.
- p. Environmental Impact: Copy of the Environmental Impact Analysis shall be submitted.
- 35 q. Soil Chemical Analysis: A chemical analysis and borings including a Cation Exchange Capacity (CEC) of the soil involved in the project must be completed as recommended by the Township engineer.
- r. Complaint Resolution Protocol: Copy of Complaint Resolution Protocol shall be submitted.
- s. Decommissioning Plan: Copy of the decommissioning plan shall be submitted.
- t. Emergency Action Plan: Copy of the Emergency Action plan shall be submitted.
- 40 u. Indemnification: An attestation that the applicant, owner, operator, and property owners will indemnify and hold the Township harmless from any costs or liability arising from the approval, installation, construction, maintenance, use, repair, or removal of the Utility-Scale Battery Storage Facility, which is subject to the Township's review and approval, shall be submitted.

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- v. Right-to-Enter: Submission of an application for a Utility-Scale Battery Storage Facility grants the Township and its agents the right to enter the facility and any participating property for inspection of the Utility-Scale Battery Storage Facility at any at any reasonable time. The Township may hire a consultant to assist with any such inspections at a reasonable cost to be charged to the.
- w. Additional Information: Any additional information, studies, or documentation requested by the Township or its agents that are deemed necessary to determine compliance with this Ordinance and other applicable laws and regulations.

I. Utility Solar Energy Facilities under PA 233

1. On or after November 29, 2024, once PA 233 of 2023 is in effect, the following provisions apply to Utility Solar Energy Facilities with a nameplate capacity of one hundred (100) megawatts or. To the extent these provisions conflict with the other provisions in §17.35 Utility Solar Energy Facilities, these provisions control. This subsection does not apply if PA 233 of 2023 is repealed, enjoined, or otherwise not in effect, and does not apply to Utility Solar Energy Facilities with a nameplate capacity of less than one hundred (100) megawatts. All provisions in §17.35 Utility Solar Energy Facilities that do not conflict with this subsection remain in full force and effect.

- a. Setbacks: Utility Solar Energy must comply with the minimum setback requirements in the table below, with setback distances measured from the nearest edge of the perimeter fencing of the facility.

Setback Description	Setback Distance
Occupied community buildings and dwellings on nonparticipating properties	300 feet from the nearest point on the outer wall
Public road right-of-way	50 feet measured from the nearest edge of a public road right-of-way
Nonparticipating parties	50 feet measured from the nearest shared property line

- b. Fencing: Fencing for the Utility Solar Energy Facilities must comply with the latest version of the National Electric Code as of November 29, 2024, or as subsequently amended.
- c. Height: Solar panel components must not exceed a maximum height of twenty-five (25) feet above ground when the arrays are at full tilt.
- d. Sound: The Utility Solar Energy Facility must not generate a maximum sound in excess of fifty-five (55) average hourly decibels as modeled at the nearest outer wall of the nearest dwelling located on an adjacent nonparticipating property. Decibel modeling shall use the A-weighted scale as designed by the American National Standards Institute.
- e. Lighting: The Utility Solar Energy Facility must implement dark sky-friendly lighting solutions.
- f. Environmental Regulations: Utility Solar Energy Facilities must comply with applicable state or federal environmental regulations.
- g. Host Community Agreement: The applicant shall enter into a host community agreement with the Township. The host community agreement shall require that, upon commencement of any operation, the Utility Solar Energy Facility owner must pay the Township two thousand dollars (\$2,000.00) per megawatt of nameplate capacity. The payment shall be used as determined by the Township for police, fire, public safety, or other infrastructure, or other projects as agreed to by the Township and the applicant.

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- h. PA 233 Requirements: The Utility Solar Energy Facility shall be subject to the other applicable rules and regulations outlined in PA 233 of 2023 and by the Michigan Public Service Commission.
- i. Applicant's Option: An applicant can elect at the time of application to have their application for a Utility Solar Energy Facility processed using the other provisions of §17.37 Utility Solar Energy Facilities, even if PA 233 of 2023 is in full effect.

Section 2. Severability and Validity.

If any portion of this Ordinance is found invalid for any reason, such holding will not affect the validity of the remaining portions of this Ordinance.

Section 3. Repealer.

All other ordinances inconsistent with the provisions of this Ordinance are hereby repealed to the extent necessary to give this Ordinance full force and effect.

Section 4. Effective Date.

This Ordinance takes effect upon the expiration of 7 days after publication as required by MCL 125.3401(7).