

**LIMA-ALLEN COUNTY REGIONAL PLANNING COMMISSION
ZONING AMENDMENT**

CASE NO. : SH-01-21-R

DATE OF REVIEW BY THE
DEVELOPMENTAL
CONTROLS COMMITTEE : 03-02-21

PETITIONER(S) : Shawnee Township Zoning Commission
2530 Ft. Amanda Road
Lima, OH 45805

REASON FOR PETITION : The petitioner seeks to add “Article XXII – Solar Energy Systems” to the current Shawnee Township Zoning Resolution.

PURPOSE FOR REZONING : To establish guidelines for the locations of residential, commercial, and industrial solar energy systems in order to protect the health, safety, comfort and general welfare of the Township resident.

DATE OF PUBLIC HEARING : N/A

DESCRIPTION OF PARCELS : N/A

LOCATION OF PARCEL : N/A

COMMENTS:

Balancing the public’s interest with those of property owners is a daunting task. Regulating solar energy systems, both large and small, requires a delicate balance between property owner rights and what should be a strong interest in the deployment of well-planned energy systems of all types by federal, state, and local governments. The Township identifies the same in section 2200.1: “Recognizing the importance of clean, sustainable, and renewable energy sources, the Township permits the use of residential and commercial solar energy systems under the following regulations to ensure the safety and welfare of all Township residents is met”. The Township additionally recognizes in section 2200 that “in some specific instances, under carefully controlled circumstances it may be in the public interest to permit the placement of solar energy facilities within certain areas of the Township.”

Article XXII seeks to establish the “general guidelines for the locations of residential, commercial, and industrial solar energy systems in order to protect the public health, safety, comfort and general welfare of the Township resident.” Allowable Districts for Permitted Use are identified in section 2202. Further, it addresses General Requirements for Energy Systems (2203), identifies Regulations for Roof Mounted & Ground Mounted Solare Systems (2204), and Regulations for Utility Grid Solar Energy Systems (2205).

Section 2202 references Allowable Districts for Permitted Use. Utility Grid Solar Energy Systems have been identified as “are proposed as a CONDITIONAL LAND USE, in Agricultural and Industrial zoning districts by the Board of Zoning of Appeals after a public hearing.” Staff believes additional clarity may be needed in this instance. There seems to be a question as to whether or not this type of system is in fact a conditional use. Staff is somewhat confused by the word proposed in this instance.

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Section 22o5 addresses Regulations for Utility Grid Solar Energy Systems. In it, the following is stated:

A Utility Grid Solar Energy System (UGSES) is designed and built to commercially provide electricity to the electric utility grid. **A UGSES shall only be permitted in Industrial Districts.** In districts where permitted, a "Utility Grid Solar Energy System, facility, or solar farm, shall be subject to the following regulations:

A Utility Grid Solar Energy System (UGSES) **maybe permitted in Agricultural and Industrial zoned districts** as a conditional land use by the Board of Zoning Appeals after a public hearing.

Staff would direct attention to the emphasized text above. There appears to be a level of confusion between the two statements. Staff notes there is certainly a difference in the meaning of the words **shall** and **maybe**(sic). A UGSES shall be permitted in Industrial Districts in one instance while it may be permitted in the next.

Finally, staff recognizes a desire to utilize setbacks for the purposes of things such as privacy, safety, environmental protections, etc. However, setback distances identified in section 2205.1(d) appear to be somewhat conflicting and potentially overly restrictive. Again, staff recognizes the delicate balance between the interests of the public and the rights of property owners. However, it also recognizes that setback that are too restrictive could ultimately render development projects infeasible.

STAFF'S RECOMMENDATIONS:

Staff recommends that the text of Article XXII – Solar Energy Systems be revisited and examined to ensure it effectively communicates the Township's desire to regulate solar energy system development. Staff has identified multiple areas which may prompt some confusion. Additionally, staff would recommend review for minor textual errors which would include two (2) references to wind energy in section 2201.

ATTACHMENT A

Proposed Article XXII – Solar Energy Systems to read as follows:

ARTICLE XXII - SOLAR ENERGY SYSTEMS

2200 – REGULATIONS FOR RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL SOLAR ENERGY SYSTEMS

The purpose of this article is to establish general guidelines for the locations of residential, commercial, and industrial solar energy systems in order to protect the public health, safety, comfort and general welfare of the Township resident.

The Township recognizes in some specific instances, under carefully controlled circumstances it may be in the public interest to permit the placement of solar energy facilities within certain areas of the Township. The Township also recognizes the need to protect its residents from unnecessary and unreasonable visual and sound interference. Recognizing that such solar energy facilities may have a negative health, safety, welfare and / or aesthetic impact upon adjoining and neighboring uses. Article XXII seeks to:

- Protect residential and agricultural areas from potential adverse impact from Solar Energy Systems:
- Permit solar energy systems in selected areas by on-site residential, commercial, or industrial users, subject to the terms, conditions, and provisions hereof:
- Ensure the public health, welfare, and safety of the Township's residents in connection with Solar Energy Systems, and:
- Avoid potential damage to real and personal property from solar energy facilities or the failure of such facility structures and related operations.

2200.1 Recognizing the importance of clean, sustainable, and renewable energy sources, the Township permits the use of residential and commercial solar energy systems under the following regulations to ensure the safety and welfare of all Township residents is met, and

2200.2 No solar energy system shall hereafter be located, constructed, repaired, extended, enlarged, converted, or altered without the full compliance with the terms of this Resolution. Said construction, alterations or modifications shall require a zoning permit.

2201- DEFINITIONS

ACCESS BUFFER: The distance from adjacent landowners' properties to the nearest solar energy facility, building or collector.

ACCESS ROADS: Provide construction and service access to each wind turbine.

ADVERSE VISUAL IMPACT: An unwelcome visual intrusion that diminishes the visual quality of an existing landscape.

ADJOINING PROPERTY LINE: The property boundary lines between the real property for the proposed installation of a solar energy system, subject of the Application and real property owned by another person, persons, or entity.

COMMERCIAL SOLAR ENERGY SYSTEM: A utility-scale facility of solar energy collectors with the primary purpose of wholesale or retail sales of generated electricity. Commonly referred to as solar farms.

DB(A): The sound pressure level in decibels. Refers to the "a" weighted scale defined by the American National Standards Institute (ANSI). A method for weighting the frequency spectrum to mimic the human ear.

DECIBEL: A logarithmic unit of measurement that expresses the magnitude of sound pressure and sound intensity.

ELECTRICAL COLLECTION SYSTEM: Consists of underground and overhead cables that carry electricity from and within groups of wind turbines and transmits it to a collection substation and point of interconnection switchyard, which transfers the electricity generated by the project to the regional power grid.

ELECTROMAGNETIC FIELD (EMF): A combination of invisible electric and magnetic fields of force. They can occur both naturally or due to human constructions.

GROUND-MOUNTED SOLAR ENERGY COLLECTOR: A solar energy collector that is not attached to and is separate from any building on the parcel of land on which the solar energy collector is located.

MEGAWATT: A unit used to measure power, equal to one million watts.

ON-SITE: A solar energy system designed to help meet the electrical needs within the limits of the area encompassed by the tract area or parcel of record on which the activity is conducted.

ROOF-MOUNTED SOLAR ENERGY COLLECTOR: A solar energy collector that is attached to a building's roof on the parcel of land including solar shingles.

SENSITIVE ENVIROMENTAL AREAS: Any areas determined by the Ohio Department of Natural Resources that consist of unique or sensitive ecological, biological or related ecosystems.

SOLAR COLLECTOR: A device or combination of devices, structure, or part of a device or structure that transforms direct solar energy into thermal, chemical, or electrical energy and that contributes significantly to a structure's energy supply.

SOLAR ENERGY: Radiant energy (direct, diffuse, and reflected) received from the sun. Total Width Total Height Solar Panel Racking Structure Existing Ground Level.

SOLAR ENERGY SYSTEM: A solar collector or other device or structural design feature of a structure that relies upon sunshine as an energy source and is capable of collecting, distributing, and storing (if appropriate to the technology) the sun's radiant energy for a beneficial use.

SOLAR PANEL: A panel consisting of an array of solar cells used to generate electricity directly from sunlight.

UTILITY GRID SOLAR ENERGY SYSTEM: A Utility Grid Solar Energy System is defined as an energy generation facility or area of land principally used to convert solar energy to electricity for resale at a profit.

WETLANDS: Lands on which water covers the soil or is present either at or near the surface of the soil or within the root zone, all year or for varying periods of time during the year, including during the growing season.

2202 ALLOWABLE DISTRICTS FOR PERMITTED USE

Roof and Ground Mounted Solar Energy Systems are permitted in all Agricultural, Residential, Commercial, and Industrial Zoning Districts, as well as within a Flood Plain Hazard District.

A Utility Grid Solar Energy Systems are proposed as a **CONDITIONAL LAND USE**, in Agricultural and Industrial zoning districts by the Board of Zoning Appeals after a public hearing.

2203 GENERAL REQUIREMENTS

2203.1 General Requirements of Solar Energy Systems.

- A. Solar energy systems are considered accessory uses, and subject to permitting requirements by the Zoning Inspector. Commercial and industrial solar energy systems and Utility Grid Solar Energy System s are subject to permitting by the Zoning Inspector as well as Lima/Allen County Building Department.
- B. Solar energy system may be installed on any surface of an existing structure, provided such installation does not result in violation of the permitted height requirements of Sections 1900 and 1901.
- C. Within all zoning districts, solar energy systems shall be repaired, replaced, or removed within 30 days of becoming non-functional.
- D. The installation of a Solar Energy System shall not negatively impact adjacent properties with additional or excessive storm water run-off and or drainage.
- E. All panels shall have tempered, non-reflective surfaces and shall comply with all Federal, State, and local construction & electrical codes.
- F. Panels and building mounts shall be installed per manufacturer's specifications.

2203.2 A solar energy ground mounted system may be installed as free-standing system, provided it meets all requirements for setback distances for accessory structures in that district. Construction shall not be installed within the road wight-of-way or an easement.

2203.3 Solar Panels or Systems shall be installed so there is minimum glare onto adjacent properties or towards the road right-of-way.

2204 **REGULATIONS FOR ROOF MOUNTED & GROUND MOUNTED SOLAR ENERGY SYSTEMS**

Solar Panels, either free-standing, building mounted or roof mounted, shall be permitted in all districts with zoning requirements related to visual appearance and appropriate safeguards.

2204.1 **Application and Site Plan Requirements:**

In all districts, the applicant shall submit to the Zoning Inspector, along with a zoning permit application, and a site plan containing the following information:

- A. Property lines and physical dimensions of the applicant's property.
- B. Location, dimensions, and types of existing major structures on the property.
- C. Location of the proposed Solar Energy System, foundations, guide wires and associated equipment.
- D. Location of easements, setbacks, obstructions, and square footage of the solar array area.
- E. The right of way, of any public road that is contiguous with the property.
- F. Solar Energy System specifications, including manufacturer, and model.
- G. Electrical components in sufficient detail to allow for a determination that the manner of installation conforms with the National Electrical Code.
- H. The design and site plan must be stamped by a professional engineer licensed to practice in the State of Ohio.

2204.2 **Roof and Building Mounted Solar Energy System Requirements:**

- A. **Permitted Location.** In residential and commercial zoning districts a roof or building mounted solar energy system may be located on the roof of the principal or accessory structure. Building mounted solar energy systems may be located on the side or rear of the structure.
- B. **Height Limitation.** Solar energy collectors shall not project more than two-(2) feet above highest point of roof or exceed maximum building height limitations allowed in that zoning district.
- C. **Placement.** For aesthetic reasons shall not be located on the front slope of a pitched roof and visible from the street facing side of street. Solar energy collectors shall not be located within three-(3) feet of any peak, eave, or valley to maintain adequate accessibility. For Commercial Applications, collectors shall be a minimum of 6 feet from any peak, eave, or valley to allow for accessibility per Ohio Fire Code.
 - 1. Roof and Building Mounted Solar Energy Collectors shall be such a weight to be safely supported by the building. A solar energy system shall not exceed 50 percent of the footprint of the principal building served.
 - 2. No solar energy system shall be mounted or affixed to any freestanding wall or fence.
 - 3. All ground-mounted solar energy systems shall be placed so that concentrated solar radiation or glare does not project onto nearby structures or roadways.
- D. **Maximum area coverage.** A solar energy system shall not exceed 50 percent of the footprint of the principal building served.
- E. **Permitting.** A zoning permit is required for any ground-mounted solar energy system and for the installation of any thermal solar energy system.
- F. **Site Plan.** Site plan is required along with application per Article 2204.1(A through H).

2204.3 **Ground Mounted Solar Energy System Requirements:**

- A. **Permitted Location.** Ground-mounted solar energy systems are only be permitted behind the rear building line of the principal building or structure. On corner lots ground mounted solar energy system shall be permitted within the side yard, and subject to corner lot set-back distance requirements for the street or roadway where construction site is located.

- B. **Height Limitation.** Ground-mounted solar energy collectors shall not exceed ten-(10) feet in height measured from the ground at the base of such equipment. The height of the ground-mounted solar energy collector shall be measured from ground level to the highest point of the solar panel.
- C. **Placement.**
 - 1. For Agricultural, Residential, Commercial, and Industrial Zoned Districts, a ground mounted solar energy system shall have a minimum set back distance of fifteen-(15) feet from all property lines.
 - 2. There shall be a minimum of twenty-five-(25) foot distance from all-natural features including water courses, wooded lots, streams, wetlands, and 100-year floodplain locations. If located in a floodplain or an area of known localized flooding, all panels, electrical wiring, automatic transfer switches, inverters, etc. shall be located above the base flood elevation.
 - 3. A ground-mounted system shall not be located over a septic system, leach field area or identified reserve area unless approved by the health department.
 - 4. All ground-mounted solar energy systems shall be placed so that concentrated solar radiation or glare does not project onto nearby structures or roadways.
 - 5. A ground mounted solar energy system shall have, to the extent required by the zoning authority, a visual buffer of natural vegetation, plantings, earth berms, and/or fencing that minimizes impacts of the solar energy system on the visual character to adjoining property owners.
- F. **Maximum area coverage.** A solar energy system shall not exceed 50 percent of the footprint of the rear yard area being served.
- G. **Permitting.** A zoning permit is required for any ground-mounted solar energy system and for the installation of any thermal solar energy system.
- H. **Site Plan.** Site plan is required along with application per Article 2204.1(A through H).

2205 REGULATIONS FOR UTILITY GRID SOLAR ENERGY SYSTEM

A Utility Grid Solar Energy System (UGSES) is designed and built to commercially provide electricity to the electric utility grid. A UGSES shall only be permitted in Industrial Districts. In districts where permitted, a "Utility Grid Solar Energy System, facility, or solar farm, shall be subject to the following regulations:

A Utility Grid Solar Energy System (UGSES) maybe permitted in Agricultural and Industrial zoned districts as a conditional land use by the Board of Zoning Appeals after a public hearing.

2205.1 Project Construction Perimeters:

- A. **Allowable Districts.** Utility Grid Solar Energy System are proposed as a conditional land use on Agricultural and Industrial zoning districts subject to review and approval by the Zoning Commission and the Board of Township Trustees after public hearings. When located in agricultural zoning districts, the solar Utility Grid Solar Energy System shall be located as much as possible to minimize impacts on prime agricultural soils.

If located in a floodplain or an area of known localized flooding, all panels, electrical wiring, automatic transfer switches, inverters, etc. shall be located above the base flood elevation. Components of the facility shall not be located over a septic system, leach field area or identified reserve area unless approved by the Health Department.
- B. **Minimum Lot Size.** The minimum lot size for a Utility Grid Solar Energy is twenty-(20) acres.

- C. **Height.** The maximum height of solar panels is fourteen-(14) feet. This takes into account for the rotation of the panels to maximize exposure to sunlight throughout the day. All other buildings and accessory structures must meet the height requirements for said structures within that zoning district.
- D. **Setback Distances.** Solar arrays and other structures shall be set back a minimum of one-thousand-(1000) feet from all property lines. Set back distance from any State or County Roadway shall be a minimum of three-hundred-(300) feet, and one-hundred fifty-(150) feet from all other road rights-of-way.

2205.2 Application and Site Plan Requirements:

The applicant shall submit to the Zoning Inspector, along with a zoning permit application, and a site plan containing the following information: A plot and development plan drawn in sufficient detail to clearly describe the following:

- A. Physical dimensions of the property, existing structures, and proposed structures.
- B. Location of existing and proposed structures.
- C. Location of the proposed Solar Energy System, foundations, guide wires and associated equipment.
- D. Location of easements, setbacks, obstructions, and square footage of the solar array area.
- E. The right of way, of any public road that is contiguous with the property.
- F. Existing topography.
- G. Existing wetlands.
- H. Proposed grading, removal of natural vegetations and relocation of wetlands (if applicable).
- I. Setbacks distances indicated from roadways, properties, property lines, major structures, etc.
- J. Proposed ingress and egress roadways, entrances / exists, interior roads, etc.
- K. Proposed safety fencing to prevent trespassing.
- L. Manufacturer's specifications and recommended installation methods for all major equipment, including solar panels, mounting systems, and foundations for poles or racks.
- M. The number of panels to be installed.
- N. Waterlines, Fire Hydrant Locations, Sewer Lines and Utility Lines identified.
- O. A description of the method of connecting the array to a building or substation.
- P. Utility interconnection data and a copy of written notification to the utility of the proposed connection.
- Q. Specific information of the type, size, height, rated power output of each proposed unit, performance, safety, and glare characteristics of each solar unit and accompanying equipment, if any.
- R. A soil boring report.
- S. Storm Water Prevention Plan (SWP3) application submitted and approved by Allen County Engineer.
- T. Any additional information as normally required by the Township as part of this Zoning Resolution.

2205.3 Additional Project and Documentation Required:

In addition to requirements for information to be provided during the site plan review and development permitting process, the facility shall not be approved for operation until the following are submitted:

- A. **Agreements / Easements.** If a lot or parcel is to be leased by the owner for a Utility Grid Solar Energy System, all property within the project boundary must be included in some type of recorded legal agreement specifying the applicable uses for the duration of the project. All necessary legal agreements between the owner of the Utility Grid Solar Energy System and the owner(s) of the property must be in place prior to commencing construction (unless specified otherwise in the conditional use permit).
- B. **Transference of Ownership.** A Transference of Ownership Letter shall be submitted by the current Utility Grid Solar Energy System owner indicating that should the Utility Grid Solar Energy System be sold to another private or public utility all specifications, requirements and terms and conditions established by the Zoning Commission and Trustees shall transfer with the new owner(s) and shall remain in force and effect.
- C. **Permit Application.** A Utility Grid Solar Energy System conditional use permit application must include a complete description of the project and sufficient documentation to demonstrate that requirements are met. Any related conditional use permit applications for additional substations or new transmission lines should be submitted at the same time. The intended route for connecting to the power grid and the alternative locations for any substation shall be disclosed. Information to be included on the site plan is specified. A development agreement may be required.

- D. **Topography / Drainage Drawings.** The applicant shall submit, based on the most current and accurate information reasonably available a topography drawing of the property that indicates how stormwater drains from the property, identifies the location of discharge points or areas, and identifies conditions present on the property that may contribute to significant soil erosion.
- E. **Protected Wildlife Statement.** A list of protected wildlife that maybe on the properties (if any) shall be identified, as well as migration patterns of waterfowl. If protected wildlife is on the property a Wildlife Impact Statement from Ohio Department of Natural Resources comprising of the potential impact to neighboring wildlife and any protected animals in the area shall be included.
- F. **Interconnection to Electrical Power Grid Statement.** Where interconnection to an electric utility grid is proposed, the applicant shall submit evidence that the electrical utility provider has been informed of the customer's intent to install an interconnection with the local electric utility grid. A copy of the approval from the local utility must also be provided before operation of an interconnected facility will be authorized.
- G. **Transportation Plan.** A transportation plan shall be developed by the applicant to map out designated routes and roadways used by used by semi-trucks, vehicles, machinery and equipment associated with this project. All staging areas shall be identified as well as any proposed or developed access drives to be used by applicant and contractors. Prior to commencement of the project the Township or County Engineer shall post maximum bridge weight limits within the project area.
- H. **Historical Locations Statement.** A statement whether historical, preserved, or archaeological locations have been identified within the project area shall be submitted. The actual locations shall not be disclosed only if they exist in the project area, to preserve the integrity of the site.
- I. **Private / Community Water Well Locations Report.** All private or community water wells shall be identified within the project area and provided in a written report. Allen County Drainage Engineer has information availability. In addition, all private and community water wells located outside of one-(1) mile from the project site shall also be identified in a separate report. This is to identify wells within the area of the project that could pose any health concerns.
- J. **FAA No-Fly Zone Statement.** The applicant shall be responsible for obtaining Federal FAA documentation report as to whether the utility grid solar energy project area is an approved air space route for aircraft or shall be designated as a "no-fly zone". If designated as no fly zone this will include aircraft and drone activity.
- K. **Hazardous Waste Disposal Plan.** Plan for the identification, control, clean up, safe removal and disposal of hazardous waste or materials shall be developed by the Applicant/Owner. Plan shall include input from local fire department and emergency management agency.
- L. **Second Party Engineer Review.** The manufacturer's engineer and another qualified engineer, who is certified in the State of Ohio shall certify that the foundation and design of the solar panels is within accepted professional standards, given local soil and climate conditions.
- M. **Performance Bond.** A Performance Surety Bond shall be provided by the applicant or owner/operator to assure repairs to public roads which may be damaged by the construction of the UGSES project. The amount of this bond will be determined by mutual agreement of the applicant, owner or operator and the Shawnee Township Board of Trustees.
- N. **Decommissioning Bond.** A Decommissioning Bond shall be required in the amount determined by the Owner/Operator and Board of Trustees to offset costs for removing all site materials, such as solar collectors, mountings, hardware, buildings, fencing, and all other infra-structure. This shall also include all costs for land reclamation to bring the land back to original pre-construction state.
- O. **Liability Insurance.** The owner or operator of each UGSES facility shall maintain a current general liability policy covering bodily injury and property damage with limits of at least three million dollars per occurrence.

- P. **Screening.** The facility shall be fully screened from adjoining properties and adjacent roads using the natural topography, or by installation of six-(6) foot evergreen buffers capable of reaching a height of fifteen-(15) feet within three years of planting, with at least 75 percent opacity at the time of planting to an extent that is reasonably practical. Evergreen buffers shall consist of Red Cedar or Norway spruce tree variety.
- Q. **Mounting System.** Solar panels or solar arrays shall be mounted onto a pole, rack or suitable foundation, in accordance with manufacturer specifications, in order to ensure the safe operation and stability of the system. The mounting structure (fixed or tracking capable) shall be comprised of materials approved by the manufacturer, which are able to fully support the system components, in accordance with applicable building permit requirements. Electrical components of the facility shall meet applicable electrical code requirements, and all electrical wires and lines less than 100 kV that are used in conjunction with the solar energy facility shall be installed underground. Multiple mounting structures shall be spaced apart at the distance recommended by the manufacturer to ensure safety and maximum efficiency.
- R. **Glare.** Glare from the Utility Grid Solar Energy System is prohibited from being a nuisance to neighboring properties or travelers on neighboring roadways. Upon written notice of such a nuisance, the Utility Grid Solar Energy System owner has no more than three-(3) months to remediate.
- S. **Security Fencing.** Unless 24-hour security guards or video surveillance is provided at the installation, the solar energy facility shall be enclosed by a security fence no less than ten-(10) feet in height with 3 rows of barbed wire nor greater than twelve-(12) feet in height without barb wire. Fencing is required for the safety and security of the area and to prevent unauthorized access. Access gates and equipment cabinets must be locked when not in use. An emergency means of entry and lighting for first responders needing immediate access to facility shall be developed.
- T. **Noise.** Inverter noise shall not exceed 40 dBA, measured at the property line. Inverters shall be off and silent after dark.
- U. **Lighting.** Lighting is limited to minimum necessary and cannot extend beyond the perimeter. Emergency lighting shall be required in sensitive areas of the project, as well as entry/exit access gates for emergency responders.
- V. **Maintenance and Upkeep Standards.** Systems shall be maintained in accordance with manufacturer's specifications. The owner and operator of the facility shall maintain the facility, including all buffer screening, in compliance with the approved plans and shall keep the facility free from overgrown vegetation, weeds, trash and debris.
1. Repairs to solar panels and as an example after storm damage, shall be completed in a timely and reasonable fashion, but no later than 30 days after the event or as notified by officials.
 2. In addition, the solar energy facility / solar farm shall be maintained in good condition and free of hazards, including but not limited to faulty wiring, loose fastenings, painting, structural repairs, and integrity of security measures. In the event of a violation of any of the foregoing provisions, the zoning inspector shall give written notice to the owner specifying the violation to the owner, and corrective action needed.
 3. The owner or operator is responsible for the cost of maintaining the solar energy facility / solar and any access road(s), though out the complex unless accepted as a public way by the Township.
- W. **Weed Control / Plantings.** The owner or designated individual of the Solar energy facility or solar farm shall have a weed prevention plan submitted to the Township to ensure the area remains free and clear of overgrown vegetation, noxious weeds, briers, and other forms of uncontrolled vegetation.

- X. **Signage.** A sign of no less than four square feet must be displayed in an easily noticed area from a public roadway indicating an address and toll-free telephone number, answered by a person twenty-four hours per day, seven days per week, for emergency calls and information inquiries. No UGSES panel or any part thereof, no fence surrounding the UGSES site, or any building or structure located upon the UGSES site may include or display any advertising sign, banner, insignia, graphics or lettering.
- Y. **Fire Department Requirements & Training.** The owner shall cooperate with the local Fire Department to develop an emergency response plans to include but not limited to emergency or fire response routes, staging areas, helipad location, fire control points, new or additional fire hydrant requirements, installation of retention or detention ponds for fire suppression and any other requirements deemed necessary. In addition, the owner shall provide initial, and annual training with the local fire department(s) in electrical and fire suppression procedures within a Utility Grid Solar Energy Project.
- Z. **Climb Protection.** All UGSES platforms and substations must be unclimbable by design or protected by anti-climbing devices or fencing.
- AA. **Liability Insurance.** The owner or operator of each UGSES facility shall maintain a current general liability policy covering bodily injury and property damage with limits of at least three million dollars per occurrence.
- BB. **Compliance with Other Standards.** All power and communication lines running between banks of solar panels and to electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by the Shawnee Township Zoning Commission in instances where shallow bedrock, water courses, or other elements of the natural landscape interferes with the ability to bury lines.
- CC. **Other Documentation Required.** The Shawnee Township Board of Trustees may require other studies, reports, certifications, and/or approvals be submitted by the applicant to ensure compliance with this section.
- DD. **Township Fees & Expenses.** Any UGWES project shall abide by all applicable fees, charges and expenses as stated in the Shawnee Township Fee Schedule. All reasonable expenses incurred by the Shawnee Township Zoning Commission, The Shawnee Township Board of Zoning Appeals, and the Shawnee Township Board of Trustees to review and certify the UGSES project plan shall be paid for by the applicant.

2205.4 Decommissioning Plan:

- A. Decommissioning plan shall be reviewed and updated as necessary every five-(5) years with the Owners, Board of Trustees and other stakeholders associated with this project. The owner of a solar electrical system is required to notify in writing the Board of Trustees for Shawnee Township within 90 days prior to discontinuation of the operation. The solar electrical system shall be perceived to be discontinued or abandoned if no electricity is generated by such system for a period of 3 continuous months.
- B. The solar electrical system owner shall be notified in writing that they have twelve-(12) months in which to dismantle and remove the system including all solar related equipment or apparatuses related thereto included but not limited to buildings, cabling, electrical components, roads, foundations, and other facilities from the property. If the owner fails to dismantle and/or remove the solar electrical system within the established time frames, the Township may complete the decommissioning at the owner's expense.
- C. As part of the decommissioning plan, all associated infrastructures shall be removed from the facility. This includes but not limited to removal of all infrastructure associated with the project. This includes but not limited to removal of all solar panels, solar panel support structures, structural bases, fencing, storage units, supply buildings, etc. In addition, the soil shall be returned to viable agricultural use, to include spading, tillage of hardened soil, or replacement of removed topsoil.