#### **ORDINANCE #399**

# AN ORDINANCE ADDING A NEW CHAPTER, CHAPTER 213, "SOLAR ENERGY SYSTEMS", TO THE LOYALSOCK TOWNSHIP CODIFICATION OF ORDINANCES.

SECTION 1 - Add Chapter 213 as follows:

#### ARTICLE I

General Provisions

## 213-1. Short Title

This chapter shall be known and may be cited as the "Solar Energy Systems Ordinance for Loyalsock Township".

#### 213-2. Purpose

The purpose of this Ordinance is to provide for the construction and operation of solar energy systems in Loyalsock Township, subject to reasonable conditions and information to be provided by an applicant that will protect the public health, safety, and welfare of the community.

## 213-3 Applicability

These regulations apply to all principal solar energy systems (PSES) and accessory solar energy systems (ASES) proposed to be constructed after the effective date of this Ordinance. It also applies to any physical modification to an existing solar energy system that materially alters the size, type, or number of solar arrays and/or other associated equipment and structures. Routine maintenance or like-kind replacements do not require a zoning permit.

## 213-4 Definitions

As used in this chapter, the following terms shall have the meanings indicated:

ACCESSORY SOLAR ENERGY SYSTEM (ASES) (often referred to as "residential solar") — An area of land or other area used for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for on-site use. An accessory solar energy system consists of one or more freestanding ground- or roof-mounted solar arrays or modules, or solar-related equipment, and is intended to primarily reduce on-site consumption of utility power or fuels.

APPLICANT — The individual or entity seeking approval for a solar energy system pursuant to this chapter. The owner of the real property upon which the solar energy system shall be erected, as well as the applicant, shall be responsible for compliance with this chapter.

ENVIRONMENTALLY STABLE — The proper placing, grading, construction, reinforcing, lining, and covering of soil, rock, or earth to ensure their resistance to erosion, sliding or other movement.

PRINCIPAL BUILDING — A building or structure in which is conducted the principal use of the lot on which the building or structure is located.

PRINCIPAL SOLAR ENERGY SYSTEM (PSES) (often referred to as "solar farm" or "commercial solar" or "solar energy facility") — An area of land or other area used for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for off-site use. Principal solar energy systems consist of one or more freestanding ground- or roof-mounted solar collector devices, solar-related equipment and other accessory structures and buildings, including light reflectors, concentrators, and heat exchangers; substations; electrical infrastructure; transmission lines and other appurtenant structures.

SOLAR ENERGY — Radiant energy (direct, diffuse and/or reflective) received from the sun.

SOLAR ENERGY FACILITY OWNER – The individual, group or entity responsible for the permitting, construction and/or operation of a Solar Energy Facility to the Solar Project Connection.

SOLAR ENERGY SYSTEM — A solar photovoltaic cell, module, or array, or solar hot air or water collector device, which relies upon solar radiation as an energy source for collection, inversion, storage, and distribution of solar energy for electricity generation or transfer of stored heat.

- A. SOLAR ARRAY A grouping of multiple solar modules with the purpose of harvesting solar energy.
- B. SOLAR CELL The smallest basic solar electric device which generates electricity when exposed to light.
- C. SOLAR MODULE/PANEL A grouping of solar cells with the purpose of harvesting solar energy.

SOLAR FACILITY CONNECTION – The high-voltage electric conveyance lines which connect a Solar Energy facility to the Solar Project Connection.

SOLAR PROJECT CONNECTION – The electric conveyance lines which connect a Solar Energy Facility to the high-voltage electric interconnection grid.

SOLAR-RELATED EQUIPMENT — Items including a solar photovoltaic cell, module, or array, or solar hot-air or water collector device panels, lines, pumps, batteries, mounting brackets, framing and possibly foundations or other structures used or intended to be used for collection of solar energy.

## ARTICLE II

# Supplemental Controls

# 213-5. Accessory solar energy systems (ASES)

- A. Regulations applicable to all accessory solar energy systems.
  - (1) Accessory solar energy systems are a permitted use in all zoning districts with restrictions. In the (C-N) Commercial-Neighborhood, (A-O) Apartment-Office, (R-1) Residential-1, and (R-U) Residential-Urban zoning districts, only roof mounted accessory solar energy systems are permitted. In the (C) Commercial zoning district only roof or wall mounted accessory solar energy systems are permitted. Ground mounted accessory solar energy systems are a conditional use in the (A-R) Agricultural -Rural-Residential and (I) Industrial zoning districts.
  - (2) ASES constructed prior to the effective date of this chapter shall not be required to meet the terms and conditions of this chapter. Any physical modification to an existing ASES, whether or not existing prior to the effective date of this chapter, that materially alters the ASES shall require approval under this chapter. Routine maintenance or like-kind replacements do not require a permit.
  - (3) The ASES layout, design and installation shall conform to applicable industry regulations and with all applicable building codes and fire and life safety requirements.
  - (4) All on-site utility transmission lines less than 34.5 kV and plumbing shall be placed underground to the greatest extent possible.
  - (5) The ASES shall be designed to use the energy created primarily for on-site use.
  - (6) All solar energy systems should be designed and located to ensure solar access without reliance on and/or interference from adjacent properties.
  - (7) All ASES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
- B. Roof-mounted and wall-mounted accessory solar energy systems.
  - (1) No zoning permit is required where allowed. A building permit is required.
  - (2) A roof-mounted or wall-mounted ASES may be located on a principal or accessory building.
  - (3) ASES mounted on roofs of any building shall not exceed the maximum building height of the applicable zoning district by more than 3 feet.
  - (4) Wall-mounted ASES shall comply with the building setbacks in the applicable zoning districts.
  - (5) Solar panels shall not extend beyond any portion of the roof edge.

(6) The owner shall provide evidence certified by an appropriately licensed professional that the roof or wall is capable of holding the load of the ASES.

# C. Ground-mounted accessory solar energy systems.

- (1) The construction or installation, replacement, or modification to any ground mounted accessory solar energy system will require a zoning permit under this ordinance. Routine maintenance or like-kind replacements do not require a permit.
- (2) Ground mounted ASES systems are prohibited: within any designated FEMA floodway; within 50 feet from the top bank of any stream or waterway; or within any delineated wetland.

# (3) Setbacks.

- (a) The minimum setbacks from side and rear property lines shall be equivalent to the building setback requirements in the applicable zoning district.
- (b) A ground mounted ASES shall not be located in the required front setback.
- (c) Ground-mounted ASES are prohibited in front yards unless unique physical circumstances or conditions exist that preclude them from being located in a side or rear yard. Such physical conditions may include, but are not limited to, topography, restricted solar access in other yards, other resource constraints, unusual situation of the principal use on the parcel, etc.
- (3) Freestanding ground mounted ASES solar panels shall not exceed 15 feet in height above the ground elevation surrounding the systems.

## (4) Coverage.

- (a) The area beneath the ground mounted ASES is considered pervious cover. However, use of impervious construction materials under the system could cause the area to be considered impervious and subject to stormwater planning.
- (5) Ground-mounted ASES shall not be placed within any legal easement or right of-way location, or be placed within any stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a construed stormwater conveyance system.
- (6) If a ground-mounted ASES is removed, any earth disturbance as a result of the removal of the ground-mounted solar energy system shall be graded and returned to environmentally stable condition.

# 213-6 Principal solar energy systems (PSES)

- A. Regulations applicable to all principal solar energy systems.
  - (1) Ground mounted Principal Solar Energy Systems are a conditional use in the (I) Industrial and (A-R) Agricultural Rural Residential zoning districts. These systems

- are prohibited in the (R-1) Residential-1, (R-U) Residential-Urban, (A-O) Apartment-Office, (C) Commercial and (C-N) Commercial-Neighborhood Zoning Districts.
- (2) Roof and wall mounted Principal Solar Energy Systems are a permitted use in the (I) Industrial, (C) Commercial, and (A-R) Agricultural Rural Residential Zoning Districts.
- (3) The required project narrative, to include the following: an overview of the project, project location, the approximate generating capacity, the number, representative types and heights of facilities to be constructed, including their generating capacity, dimensions, and respective manufacturers, and description of any ancillary facilities to the solar energy system.
- (4) An affidavit or similar evidence of agreement between the property owner and the solar energy facility owner or operator demonstrating permission to apply for necessary permits for construction and operation of a solar energy facility.
- (5) PSES applications after the effective date of this chapter shall be required to meet the terms and conditions of the Loyalsock Township Code, to potentially include but not be limited to Chapter 183, Stormwater Management and Chapter 190, Subdivision and Land Development Ordinances.
- (6) The PSES layout, design and installation shall conform to applicable industry regulations, and with all applicable building codes and any fire and life safety requirements.
- (7) All on-site utility transmission lines less than 34.5 kV and plumbing shall be placed underground to the greatest extent feasible.
- (8) The owner of a PSES shall provide the Township written confirmation of acceptance from the public utility company that the PSES may connect to the public grid-system.
- (9) If a PSES is being used as an accessory use for commercial or industrial activity on another property, then the Township shall be informed of the intent of the PSES.
- (10) Signage shall comply with the prevailing sign regulations.
- (11) All PSES shall be situated to eliminate concentrated glare onto nearby structures or roadways. Exterior surfaces shall have a non-reflective finish. The applicant has the burden of proving that any glare produced does not have a significant adverse impact on neighboring or adjacent uses either through siting or through mitigation. The applicant will provide a completed glare study ensuring that reflective glare is not directed towards, nor upon any adjacent properties as well as any adjacent street right-of-way.
- (12) All solar energy systems should be designed and located to ensure solar access without reliance on and/or interference from adjacent properties.
- (13) The PSES owner and/or operator shall maintain a phone number throughout the life of the project for the Loyalsock Township Code Enforcement Officer to contact with

inquiries and verified complaints. The PSES owner and/or operator shall make reasonable efforts to respond to the inquiries and complaints. A contact name, with knowledge of the system, must be provided to Loyalsock Township with updates due to employee advancement or turnover. This contact information shall also be placed on a sign attached to the entrance gate to the facility.

- B. Ground-mounted principal solar energy systems.
  - The construction or installation, replacement, or modification to any ground mounted principal solar energy system will require a zoning permit under this ordinance. Routine maintenance or like-kind replacements do not require a permit.
  - (2) Ground mounted PSES systems are prohibited: within any designated FEMA floodway; within 50 feet from the top bank of any stream or waterway; or within any delineated wetland.
  - (3) Minimum lot size.
    - (a) The PSES shall meet the lot size requirements of the applicable zoning district.
  - (4) Setbacks.
    - (a) PSES shall comply with the following building setback requirements:
      - [1] Building setbacks of the applicable zoning districts, except adjacent to any parcel with an existing residential structure, the solar panels and any other associated structures must follow a minimum (50) fifty-foot setback while the fencing, as required for security, shall be considered a principal structure for the purposes of setbacks and comply with the minimum setback requirements of the underlying zoning district.
    - (b) If the PSES occupies two or more adjacent properties, setbacks between the adjacent properties shall be waived along the shared property boundaries so that the PSES may be installed continuously and make the most efficient use of the project area.

# (5) Height.

- (a) Ground-mounted PSES solar panels shall not exceed 15 feet in height. All other PSES components should comply with the underlying district maximum height requirement.
- (b) There are no maximum height restrictions for structures that support Solar Facility connections and Solar Project connections.
- (6) Impervious coverage.
  - (a) According to the Pennsylvania DEP, the area beneath the ground mounted PSES is considered pervious cover. However, use of impervious construction materials such as stone under the solar system could be considered impervious

area to be included when calculating the pre-development to post development runoff analysis in determining the need for Post Construction Stormwater Management Practices.

(b) Gravel or paved access roads servicing the PSES and support buildings shall be considered impervious coverage and calculated as part of the impervious coverage for stormwater management purposes.

# (7) Screening and vegetation.

- (a) Street screening shall consist of slat fencing or shrubs, six feet to eight feet high when mature, that shall be planted every 15 feet of property abutting a public right-of-way. Shrubs shall be planted adjacent to or outside of the road right-of-way. Solar perimeter fence shall be placed between shrubs and solar panels. Reasonable modifications to these requirements may be requested.
- (b) Residential buffer screening may be slat fencing or a row of evergreen conifers or broadleaf evergreens spaced in accordance with the chosen species to achieve a continuous visual barrier reaching six feet to eight feet in height within two years of planting. Screening may be a combination of plantings and/or structures with prior approval by the Township. Reasonable modifications to these requirements may be requested.
- (c) Perimeter fence shall be placed between shrubs and solar panels.
- (d) Widespread use of herbicides to control ground cover growth is prohibited.
- (8) Unless agreed to by the easement or right-of-way holder, ground mounted PSES shall not be placed within any legal easement or right-of-way location, or be placed within any stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system.

# (9) Security:

- (a) In accordance with NEC, all ground mounted PSES shall be completely enclosed by fencing with a locking gate. Fence to be a maximum of six-feet-high and may be lined with barbed wire if necessary. The fence shall be kept free of all vegetation.
- (b) A clearly visible warning sign shall be placed at the base of all pad mounted transformers and substations and on the fence surrounding the PSES informing individuals of potential voltage hazards.

# (10) Access:

At a minimum, a 14-foot-wide stabilized access road must be provided from state or municipal roadways to the PSES site that is maintained year round in a dust free condition. At a minimum, a 20-foot wide cartway shall be provided on the inside

perimeter fencing between the fence and Solar Array. Spacing between the Solar Array rows shall allow access for maintenance vehicles and emergency vehicles.

- (11) If a ground-mounted PSES is removed, any earth disturbance as a result of the removal of the ground-mounted solar energy system must be returned to an environmentally stable condition.
- C. Roof or wall mounted principal solar energy systems.
  - (1) No zoning permit is required where allowed. A building permit is required.
  - (2) The owner shall provide evidence certified by an appropriately licensed professional that the roof is capable of holding the load of the PSES.

# D. Local emergency services.

- (1) The applicant shall provide a copy of the project summary and site plan to local emergency services, including paid or volunteer fire department(s).
- (2) The applicant shall cooperate with emergency services to develop and coordinate implementation of an emergency response plan for the solar energy facility. This emergency response plan shall be included with the land development application.

# E. Decommissioning.

The PSES owner and/or operator is required to notify the Township immediately upon cessation or abandonment of the operation. The PSES shall be presumed to be discontinued or abandoned if no electricity is generated from the solar panels for a period of twelve (12) continuous months. The PSES owner and/or operator shall then have eighteen (18) months in which to dismantle and remove the PSES including all solar related equipment or appurtenances related thereto, including but not limited to buildings, cabling, electrical components, roads, foundations, solar facility connections and other associated facilities in accordance with agreements with landowners and good industry practice. To the extent possible, the materials shall be re-sold or salvaged. Materials that cannot be re-sold or salvaged shall be disposed of at a facility authorized to dispose of such materials by federal or state law. Any soil exposed during the removal shall be stabilized in accordance with applicable erosion and sediment control standards and requirements. Any access drive paved aprons from public roads shall remain for future use unless directed otherwise by the landowner.

The PSES site area shall be restored to its pre-existing condition, suitable for its prior use. The landowner may authorize in writing that any buffer landscaping or access roads installed to accommodate the PSES will remain.

Any necessary permits, such as Erosion & Sedimentation and NPDES permits, shall be obtained prior to decommissioning activities.

The developer shall, at the time of conditional use application, provide the Township with an estimate of the cost of performing the decommissioning activities required herein. The solar energy facility owner shall provide financial security of 110% of the estimated cost of decommissioning, which will be reviewed by the Township's consulting engineer. The estimate may include an estimated salvage and re-sale value, discounted by a factor of 10%. The decommissioning cost estimate formula shall be:

Gross Cost of Decommissioning Activities

- 90% credit of salvage and re-sale value

= the Decommissioning Cost Estimate

On every 5<sup>th</sup> anniversary of the date providing the decommissioning financial security, the solar energy facility owner shall provide an updated decommission cost estimate, utilizing the formula set forth above with adjustments for inflation and cost & value changes. If the decommissioning security amount decreases by greater than 10%, the Township shall release from security any amounts held in excess of 110% of the updated decommission cost estimate. The decommissioning security may be in the form of cash deposit, surety bond, irrevocable letter of credit, cashier's check, or escrow account from a federal or Commonwealth chartered lending institution in the amount of 110% of the total proposed decommission cost estimate and in a form satisfactory to the Township. Prior to final approval of any land development plans for the PSES, the PSES developer shall enter into a Decommissioning Agreement with the Township outlining the responsibility of the parties under this Agreement as to the decommissioning of the PSES.

#### ARTICLE III

Administration; certain exemptions; fees and costs; enforcement; violations and penalties

# 213-7 Applications.

- (1) Permit applications shall document compliance with this chapter and shall be accompanied by drawings showing the location of the solar energy system on the building or property, including property lines. Permits must be kept on the premises where the solar energy system is located.
- (2) The permit shall be revoked if the solar energy system, whether new or preexisting, is moved or otherwise altered, either intentionally or by natural forces, in a manner which causes the solar energy system not to be in conformity with this chapter. In the case of nonconformity caused by natural forces, the owner shall have a maximum of 90 days to initiate necessary remedial action to bring the system back in conformance with this chapter.

- (3) The solar energy system must be properly maintained and be kept free from all hazards, including, but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety or general welfare.
- (4) Where conditional use approval is required for PSES or ASES Systems, the conditional use approval and land development plan processes can be concurrent. All necessary stormwater management, erosion and sedimentation control, and any required NPDES permits must be obtained prior to receiving final Township approval of the land development plan. An approved and recorded land development plan is required for Ground mounted PSES Systems before making application for a zoning permit.
- (5) Ground mounted ASES systems for single-family residential uses are exempt from the land development process.
- (6) Roof and wall mounted PSES and ASES systems are exempt from the land development process.

## 213-8 Fees and costs.

(1) The applicant shall pay all, land development fees, any third-party review fees, permit fees and any inspection fees when seeking approval of a solar energy system under this chapter, which fees shall be set by resolution.

#### 213-9 Modifications.

(1) The Township Board of Supervisors may grant a modification of the requirements of one or more provisions of this chapter if the literal enforcement will exact undue hardship because of peculiar conditions pertaining to the property in question, provided that such modification will not be contrary to the public interest and that the purpose and intent of this chapter is observed. All requests for a modification shall be in writing and shall state in full the grounds and facts of unreasonableness or hardship on which the request is based, the provision or provisions of this chapter involved and the minimum modification necessary.

#### 213-10 Enforcement.

- (1) Upon the receipt of a written complaint setting forth the existence of unauthorized construction, modification, or use in violation of this chapter, or other notice thereof, the Zoning and Code Enforcement Officer that may be authorized by the Township Board of Supervisors shall cause written notice to be given either by personal service or registered or certified mail to the applicant of the property upon which the violation exists to immediately cease the construction, modification or the unauthorized use of the solar energy system. Such a written notice shall be required to enforce the remedies set forth in this section. However, the Township shall still be entitled to give a verbal notice for defective systems as authorized above.
- (2) Upon failure of such applicant to comply as directed in said notice, the Enforcement Officer, other municipal officials, or solicitor may appear on behalf of the Township and

initiate legal proceedings to enforce the provisions of this chapter before a District Magistrate.

- (3) Any applicant who or which shall violate or permit to be violated the provisions of this chapter shall, upon being found liable therefor in a civil enforcement proceeding brought by Loyalsock Township before a District Magistrate, pay a fine of not more than \$1,000, plus all court costs, including reasonable attorney's fees incurred by the Township as a result thereof. No fine shall commence or be imposed, levied, or be payable until the date of the determination of the violation by a District Magistrate. Each day that a violation exists and is continued shall constitute a separate offense, unless the District Magistrate who determines that a violation has occurred further shall determine that there was a good faith basis for the defendant to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of determination by such District Magistrate, and thereafter every day shall constitute a separate offense.
- (4) In addition, the Township shall also be entitled to recover from any applicant all the Township's costs or fees (collectively the "costs") arising out of or related to the application or enforcement of this chapter. Such costs may also include those to remedy violations of this chapter or to abate nuisances. The costs shall include, but not be limited to, engineer fees, geologist fees, attorney fees, staff/employee time, and any unresolved property maintenance code violations. The costs may be collected as a municipal claim under applicable law against the property upon which the solar energy system, or portions thereof, is located.

# 213-11 Construal of provisions; severability

A. The provisions of this chapter shall be construed to the maximum extent possible to further the purposes and policies set forth herein, as consistent with applicable state statutes and regulations. If the provisions of this chapter and state law are in conflict, then state law shall prevail.

B. It is the intention of the Township that the provisions of this chapter are severable, and if any provisions of this chapter shall be declared unconstitutional or invalid by the judgment or decree of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining provisions of this chapter.

# 213-12. Amendment to Zoning Ordinance and Codification of Ordinance

It is the intent of the Board of Supervisors of Loyalsock Township that this new Chapter 213 of the Loyalsock Township Codification of Ordinances be codified as an addition to and amendment of the Loyalsock Township Zoning Ordinance of 1994, as amended ("Zoning Ordinance"). Accordingly, upon enactment, this Ordinance shall be considered part of and incorporated into the Zoning Ordinance by reference as though fully set forth therein. To the extent provisions of this Ordinance amend, modify, or otherwise alter the

Zoning Ordinance, the Zoning Ordinance shall be read and interpreted to include the provisions of this Ordinance in full. For example, if the provisions of this Ordinance amend, modify, or otherwise alter the Table of Uses or the listed permitted or conditional uses in particular zoning districts, the Zoning Ordinance shall read and interpreted to include the applicable language of this Ordinance in those provisions of the Zoning Ordinance. All provisions of this Ordinance shall be applied and interpreted as if this Ordinance is part of the Zoning Ordinance and subject to its provisions, as amended by this Ordinance, and the requirements of the Pennsylvania Municipalities Planning Code. Upon future recodification of the Zoning Ordinance, the Zoning Ordinance shall be amended, modified, and otherwise altered to include all applicable provisions of this Ordinance. Any applications, permits, approvals, variances, enforcement, violations, penalties, or other relief from or application of this Ordinance shall be governed by the provisions of the Zoning Ordinance, as this Ordinance is an amendment of and addition to the Zoning Ordinance.

# 213-13 Repealer

All prior ordinances that are inconsistent herewith are hereby repealed to the extent of such inconsistency.

#### 213-14 When effective.

This chapter shall become effective five days (5) after its enactment.

ENACTED and ORDAINED at a meeting of the Board of Supervisors of Loyalsock Township, Lycoming County, Pennsylvania, the day of day of 2022.

LOYALSOCK TOWNSHIP BOARD OF SUPERVISORS

ATTEST

secretary

Virginia Exton

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